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Financial Feasibility Assessment Manual for Rural Health Care Facilities

Volume 1

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FINANCIAL FEASIBILITY ASSESSMENT MANUAL

FOR

RURAL HEALTH CARE FACILITIES

Volume I

OCTOBER 1983

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I. INTRODUCTION

The purpose of this manual is to provide Farmers Home Administration (FmHA) loan officers with a set of guidelines for the assessment of loan applications submitted by representatives of rural health care institutions. These guidelines provide only indicators of the feasibility of health care projects and should therefore be used strictly as a supplement to the normal FmHA loan application review process. They may be used by both the Community Facilities Division and the Business and Industry Loan Division for assessment of health care facility loan requests.

The manual is comprised of eleven chapters which follow the sequence of steps normally taken in a feasibility study. It focuses primarily on short-term hospitals 1/ because they are responsible for the greatest proportion of health care facility expenditures, and their involvement in the loan-making process is the most extensive. However, nursing homes and clinics are referred to throughout the manual where appropriate.

In the Appendix, there are three case studies, each dealing with a hospital, nursing home or clinic feasibility study. It is advisable for the reader to apply the concepts which are presented in this manual (and

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1/ A short-term (or acute care) hospital is defined by the American Hospital Association as a hospital in which the average length of stay is less than thirty days. Conversely, a long-term hospital is one in which the average length of stay is thirty days or more.

summarized in the Feasibility Worksheets in Chapter XI) to these hypothetical situations.

In practice, the Feasibility Worksheets are designed to be used as detachable worksheets for the FmHA loan officer's use in reviewing data submitted by applicants. These worksheets can then be used as a basis for the analysis required to make the appropriate loan decision. They may also be used to monitor loans on a routine basis according to data submitted by the borrower.

Following the introduction, Chapter II provides an overview of the health care industry and addresses the most significant issues currently confronting it. This chapter is intended to provide the FmHA loan officer with the proper perspective from which to make a loan decision concerning a rural health care facility. Chapter III reviews the entire loan analysis process and its major analytical components (demand, financial and management). Chapter IV reviews the types of information which must be available in order to make the appropriate loan decision and the sources from which such information may be drawn. Chapter V presents the methodology used for derivation of demand forecasts, including a discussion of each of the major determinants of the demand for health care services. Chapters VI and VII include a discussion of revenue, expense and debt-service forecasts while Chapter VIII discusses the most commonly forecasted financial statements. Chapter IX describes the types of ratio analysis which can be performed on the pro forma financial statements addressed in the previous chapter. It also includes the major limitations of these ratios and their normal values in the hospital industry. Chapter X includes a description of the most important qualitative, management-related factors which should be assessed by the FmHA loan officer in addition to some quantitative indices of management performance

and efficiency. Finally, Chapter XI contains the Feasibility Checklists and a detailed glossary of health care terminology. In the Appendix are the three case studies and a directory of Health Systems Agencies (HSA) and other organizations which may be valuable sources of community, facility and management information.

This manual was designed for two groups of users. First, it should enable a person who is inexperienced in health care facility loan-making to increase his understanding of the health care environment and to realize that a sound decision can not be be made without a reasonable knowledge of this unique industry. Secondly, the manual should be useful to the experienced loan officer, as it provides a specific, health care oriented, analytic methodology for loan application assessment, many aspects of which are frequently overlooked. However, the more experienced reader may want to either refer only to those chapters which pertain to his particular needs or use just the Feasibility Checklists as a guide.

II. OVERVIEW OF THE HEALTH CARE INDUSTRY

INTRODUCTION

The nation's health care system is one of the fastest growing segments of the economy. Health care in the United States is truly a big business and is one of the largest industries in the country, having spent $286.6 billion in 1981.

Health care spending has grown from 5.2 percent of the Gross National Product (GNP) in 1960 to 10.1 percent in 1981. Despite the formidable size of the health care industry, it is still characterized as a "cottage industry". In other words, it is highly fragmented, consisting of over 7,000 hospitals with more the 1.36 million beds, over 23,000 skilled nursing care facilities with approximately 1.53 million beds, thousands of laboratories and hundreds of suppliers of drugs, medical equipment and other medical supplies. Many types of ownership are represented--government (federal, state and local), voluntary (not-for-profit) and proprietary (single ownerships, partnerships and corporations). Adding to the complexity, many health care facilities offer a broad range of services, some of which are unrelated to health care (i.e. hotel management). Likewise, similar services can be offered by several types of institutions.

Health care delivery in the United States has become very costly. The average hospital stay (which cost less than $350 in 1965) cost

approximately $2,260 in 1981. The average cost per patient day has risen to a point where it now costs nearly $300 for a medical-surgical bed in some urban areas, up from $134 in 1975. This rapid rise in health care costs (particularly government expenditures) has become a driving force behind much of the recent federal health care legislation. Following is a review of some of the significant current trends in health care. Included is a discussion of public and private responses to rising costs and the implications for the financial management of health care facilities.

TRENDS IN HEALTH CARE EXPENDITURES

Between 1950 and 1981, the percentage of the GNP attributed to national health care expenditures more than doubled, rising from 4.5 % to 10.1% (see Table II-1). Of this increase in total health related expenditures during that period, the most dramatic rise was attributable to the public sector (particularly the Medicare and Medicaid programs). Federal, state and local governments financed over 40% of the nation's health bill in 1981, compared to only 18% in 1965.

Population growth, price increases and increased per capita utilization are among the major factors contributing to the rise in personal health care expenditures. During the past three decades, higher prices and utilization have consistently accounted for over 90% of the total increase, and 63% of that amount was due to inflation. (See Table II-2.) As indicated in Table II-3, the inflation rate for the health care industry has exceeded that of the overall economy, with the exception of a brief period during the Economic Stabilization Period (August 1971-April 1974) and at the end of the Carter Administration (late 1970's). Although health care prices continued to rise rapidly during the latter

period, the overall price index rose at an even faster rate. During recent years, general inflation has declined markedly, but health care prices have continued to increase.

The other major factors contributing to the rise in personal health expenditures are increased use and intensity of care. Annual hospital admissions rose significantly between 1950 and 1980, as shown in Table II-4. The number of outpatient visits per year also rose substantially during that period but began to decline after 1975. The recent leveling off of utilization suggests that rapidly rising costs have become a deterrent to providers and consumers of health care services. Factors contributing to the long-term trend of increased utilization of health care facilities are discussed in the following section.

Demand

Demand for health care services has been spurred by the growth of private and public health insurance programs, increased health care resources, growth in personal disposable income, advanced medical technology, and an increasing number of people over age 65. The elderly now represent over 11.3% of the U.S. population, in comparison with 9.8% in 1980. Because of the higher incidence of medical problems (particularly chronic illness) within this segment of the population, the elderly spend an average of three to four times more on health care than persons under 65.

Slowly rising incomes have made more money available to spend on health care, and better health care education has provided an incentive to increase utilization. In addition, many people have benefitted from the following tax incentives:

- Employer entitlement to deduct health insurance premiums as a business expense, resulting in a tax deduction
- Exclusion of employee health care benefits from employees' personal income
- Permitting individuals to take income tax deductions for health insurance premiums paid by them
- Allowing individuals to itemize medical expenses on their income tax returns.

Clearly, from both the employer's and employee's perspectives, these tax incentives have long provided a relatively inexpensive way to obtain health care, resulting in a marked increase in utilization. However, the Reagan Administration is considering the elimination of most of these tax benefits, which may result in a decline in utilization in the future.

Third-party payors now account for over 90 percent of all personal health care expenditures. Consequently, the costs actually borne by the patient at the time of service delivery are reduced substantially. In addition, the effective demand for health care services is essentially provider-induced; it is the physician who admits patients, determines the length of stay, refers them to specialists, and prescribes drugs and treatment. Since patients are directly responsible for a low percentage of total medical expenses and have limited or no control over services utilized, effective demand has escalated even further.

Finally, the tendency for physicians to practice "defensive medicine" in the wake of costly malpractice settlements has contributed substantially to greater utilization of services.

Supply

Due to increased demand as well as government support (particularly through the Hill-Burton Act) health care resources have expanded tremendously during the past three decades.

Over $13 billion was spent nationally on hospital construction between 1946 and 1972. During that time, 30 percent of that funding was provided by the Hill-Burton program. The number of short-term beds nearly doubled, increasing from 505,000 in 1950 to nearly 947,000 in 1975. (See Table II-5.) Despite the termination of Hill-Burton grants in 1972 (although the program provided some loans until 1976), the number of short-term beds has continued to rise, resulting in 1,111,000 beds in 1981.

Public funding for resource expansion and extensive third-party payments have enabled most rural and smaller hospitals to acquire expensive and sophisticated equipment and to build specialized facilities such as intensive care units. While only 21 percent of nonprofit hospitals with more than 300 beds had an intensive care unit in 1958, nearly all of them with more than 200 beds (and more than half of those with fewer than 100 beds) had such specialized units by 1980.

The Health Professions Educational Assistance Act of 1963 was a landmark piece of legislation which addressed the perceived shortage of health professionals, particularly physicians. Between 1963 and 1980, federal spending for health care professional training totalled $6.5 billion. As illustrated in Table II-6, this has resulted in a 64 percent increase in the number of physicians (from 259,000 in 1960 to 426,000 in 1980) and a 147 percent increase in the number of registered nurses (from 527,000 in 1960 to 1,302,000 in 1980). The table also indicates that the number of other health care professionals per 1,000 population is steadily advancing. Despite the fact that in 1980 the Reagan Administration significantly cut back public funds for training health care professionals, the Bureau of Labor Statistics projects that in 1990, there will be a

further rise in the number of professionals per 1,000 population. Specifically, the Bureau predicts that there will be 2.6 physicians and 6.6 registered nurses per 1,000 population in 1990. This represents a significant increase over the current values of 1.9 and 5.7, respectively. The steady rise in the number of physicians will result in approximately 70,000 surplus physicians by 1990 and 145,000 by the year 2000.

In the past, new technologies have been introduced before their effectiveness and efficiency were sufficiently understood. For example, there have been a large number of hospitals which have acquired computerized axial tomography (CAT) scanners (costing in excess of $750,000). However, there is insufficient justification for many of these purchases as the cost has shown to be excessively high in relation to effectiveness. In addition, the establishment of special care units and other costly patient services have contributed to expanded resources, making even more services available for use. Because most of the new equipment and services involve advanced technology, costs of providing these services have continued to increase.

Hospital Expenditures

Hospitals have become the focus of health care cost containment because they have traditionally been responsible for a large portion of the nation's health care expnditures. The portion attributed to hospitals has been steadily rising during the past forty years, as illustrated in Table II-7. In 1965, hospital expenditures accounted for 33.8 percent of all health care expenses whereas in 1981, they accounted for 41.2 percent.

The inflation rate in the health care sector has been significantly higher than the overall consumer price index since the

mid-1960s. As shown in Table II-8, health care prices jumped dramatically with the inception of the Medicare and Medicaid programs in 1966 and 1967, respectively. Slowed temporarily by the Economic Stabilization Program from August 1971 to April 1974, health care service prices outpaced the increase in all other sources by substantial margins. In fact, hospital room charges have risen at almost twice the rate of non-health care services during the past decade.

The trend in the average cost per patient day (ACPPD) over the past twenty-five years is shown in Table II-9. In 1950, the ACPPD was under $16, but by 1981, it had reached $285. Adjusting these figures for inflation reveals a five-fold increase in price during this period.

Table II-10 further illustrates the disparity of the ACPPD in relation to the overall CPI. The ACPPD increased significantly following the inception of Medicare and Medicaid, with an average annual percentage increase of more than 13 percent since that time.

In summary, the fact that the health care industry is large, highly complex, virtually non-competitive, and largely cost-reimbursed has resulted in an inefficient health care delivery system. Consequently, there is a need for health care facilities to focus on both cost containment and reorganization while maintaining a high quality of care.

CURRENT ISSUES AFFECTING HEALTH CARE FACILITY RESOURCE EXPANSION

The issues which are discussed in this section by no means encompass all of the challenges facing the health care industry. Only those which might have a significant bearing on the assessment of a health care facility loan application are considered. These issues are:

- Third-party reimbursement,
- Health system planning, and
- Quality control.

Other important issues which are briefly addressed are:

- Technological changes in the health care industry,
- Increased utilization of outpatient and home health services,
- Trend toward pre-paid health insurance (reflected in Health Maintenance Organization utilization),
- Preferred provider organizations, and
- Multi-hospital systems.

Third Party Reimbursement

A typical hospital's statement of revenues and expenses reveals that approximately 95 percent of operating revenue is derived from payments made for patient care services. The hospital industry is unique because, unlike other industries, it has had relatively little control over the amount of payment received for its product. The major reason is that most hospital bills are not paid directly by patients but by third parties. A third party payor is an organization (either public or private in nature) which pays a portion of costs (or charges) for health care services delivered to individuals in exchange for premiums, deductibles, copayments and/or taxes. Since 75-90% of the revenue received for patient care services is drawn from third-party payors, the manner in which hospitals are reimbursed for their services is of utmost importance.

Currently, the three major third-party payors are Medicare, Medicaid & Blue Cross. In 1981, the first two accounted for approximately 54% of the revenue received for patient care services by short-term, non-profit hospitals. About 33% was provided by Blue Cross and commerical

insurers. The remainder came from self-payors (11%) and non-operating revenue such as grants and endowments (2%).

The most enduring and influential third-party payor has been Blue Cross, which is currently comprised of 98 regional Blue Cross plans tied together in a loose federation by the Blue Cross Association. Blue Cross was the first such payor to influence capital expansion of health care facilities, beginning reimbursement for that purpose in the 1930s.

The Medicare and Medicaid programs were established in 1966 and 1967, respectively, by an amendment to the Social Security Act of 1947 (Titles XVIII and XIX of Public Law 89-97). While Medicare provides medical coverage for a large percentage of Americans who are 65 years or older (in addition to many who are disabled), Medicaid provides health care insurance for the nation's indigent.

A hospital, like any other business, maintains a "price list" for the services that it provides, and it uses this list to charge its patients for both routine services (room and board) and ancillary services (medically-related support services). From the late 1920s, when Blue Cross became involved in health care insurance, until the mid-1960s, facilities were either reimbursed according to charges or costs, depending on the particular Blue Cross Plan. However, "reasonable costs" eventually became the basis for reimbursement, with few exceptions. The reason for this change was that a profit factor had often been incorporated into hospitals' charges. These profit factors have varied greatly among institutions and included many items which payors often could not, or would not, support. Consequently, the three major third-party payors established reimbursement formulae based on reasonable costs. (Only self-payors and commercial insurance companies now pay according to charges rather than

costs.) In general, reasonable costs are determined by subtracting non-reimbursable costs from total costs to arrive at total allowable costs. Reclassifications and adjustments to allowable costs result in total reimbursable costs. By making these restrictions and adjustments, third-party payors were satisfied for many years that, for the most part, they were paying only for services which they intended to cover.

Since the implementation of the Medicare and Medicaid programs, the rate of inflation in the health care industry has been disproportionately high in relation to that of the overall economy. Ironically, the major cause of increased prices has been the fact that both programs, in addition to most Blue Cross Plans, have reimbursed on a retrospective basis for reasonable costs. The impact which this methodology has had on the kinds and amounts of expenditures made by health care providers has been considerable. Since the mid-1960s, there has been virtually no incentive to provide less costly or more efficient care; regardless of the expenses incurred, most were reimbursed.

As consumers and providers have recognized the diseconomies in our existing system, there has been greater emphasis on establishment of a prospective reimbursement methodology (by which payment is determined in advance of the period in which costs are incurred). The objective of prospective reimbursement is to reduce overall health care costs by providing incentives for cost-containment and reducing the rate of increase in reimbursement amounts. Already faced with significant financial challenges, many health care managers now fear for their institutions' ability to survive under a prospective payment system.

During the past decade, a number of states and Blue Cross plans have had experience with prospective rate-setting. By 1982, there was a

total of 30 prospective payment contracts administered by Blue Cross and 15 administered by state Medicaid agencies.

Two recent pieces of legislation affecting reimbursement methodology are the Omnibus Budget Reconciliation Act of 1981 and the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Briefly, the former provided for:

- making payments to promote closure or conversion of underutilized hospitals
- reductions in Medicare and Medicaid payments for unnecessary hospital services
- reductions in reimbursement for inappropriate utilization
- limited reimbursement for many specific health care functions (i.e. renal dialyses, drug provision, nursing differential).

The primary purposes of TEFRA were to:

- require the Secretary of HHS to develop a prospective reimbursement methodology for use by Medicare
- make many additional Medicare reimbursement restrictions, leaving few services exempt from reductions in reimbursement
- convert the Medicare reimbursement methodology from a per diem to a per discharge basis
- establish reimbursement limits and target rates for all Medicare inpatient services, not just routine services.

TEFRA became effective on October 1, 1982 and was intended to be used for three years or until a prospective payment system was adopted. Hospitals with fewer than 50 beds were exempted from TEFRA coverage and were entitled to continue receiving reimbursement on a reasonable cost basis.

In April of 1983, the Social Security Amendments of 1983 (P.L. 98-21), were signed into law by President Reagan. This landmark piece of legislation laid out a detailed prospective payment methodology to be applied to the Medicare programs. The amendments, applicable only to

inpatient services received by Medicare patients, established a prospective reimbursement rate for each of 467 diagnostic-related groups (DRGs). A DRG is a specific illness category characterized by such attributes as primary and secondary diagnoses, surgical procedures performed, existing complications, etc. Each discharged Medicare patient will be assigned to one DRG for purposes of reimbursement to the health care provider. Although payment rates for DRGs will eventually be based on the national Medicare cost for each DRG, the program will be phased in over a three-year period (from Oct. 1, 1983 to Oct. 1, 1986). During this period, each facility's historical costs, as well as a regional and urban-rural differential, will be factored into its Medicare reimbursement settlement. By 1986, all Medicare reimbursement will be based solely on national rates, regardless of individual hospital costs or geographic location. (See Chapter VII for a detailed explanation of DRG rate determination.)

In addition, adjustments for individual institutions will be made for the number of "outliers" treated (cases requiring unusual lengths of stay or consumption of resources) and the proportion of indigents treated. Direct medical education expenses and outpatient costs will be excluded from the prospective rates and paid on a "reasonable cost" basis. (However, indirect medical costs will be included.)

Psychiatric, rehabilitation, long-term care and children's hospitals will be exempt from prospective payment because the proposed DRG system would not be applicable to their case-mix. Consequently, they will be reimbursed on a "reasonable cost" basis. Sole community providers will be reimbursed indefinitely according to the methodology used for the first year of the TEFRA/PPS transition period; 75 percent will be based on the hospital's cost base, and 25 percent will be based on regional DRG rates.

A hospital which claimed sole community provider status prior to the transition period is entitled to retain it. Once this status is secured, it will be kept until the facility no longer meets the criteria. Also, if a sole community provider experiences a decline of more than 5 percent of its total volume over the previous year due to circumstances beyond its control, the Secretary of HHS will be required (during the three year phase-in period) to provide an adjustment to fully compensate it for fixed costs and the reasonable cost of maintaining core staff and services. A "sole community hospital" is a facility that is the sole source of inpatient hospital services reasonably available in a geographical area due to such factors as isolated location, absence of other hospitals in the area, weather and travel conditions, or inability to recruit a sufficient number of physicians.

Congress voted to pass through all Medicare-related capital expenses (which currently comprise about 6% of Medicare costs) until 1986, when these expenses, including interest, depreciation, and return on equity, will likely be incorporated into the national prospective DRG rates. Consequently, facilities may receive substantially less reimbursement for capital projects in the future. This will likely create problems for health care institutions because:

- capital requirements vary among hospitals and
- they vary substantially from year to year within institutions.

This prospective reimbursement system has important implications for health care facilities. First, Medicare reimbursement may be significantly decreased, requiring hospitals to:

- adopt effective cost-containment measures and
- analyze their case-mix.

This means that there will likely be less money available for capital expenditures, as well as day to day operating costs.

The FmHA loan officer should realize that, although rural acute care facilities will be included under the prospective payment system, those which are sole community providers will still receive some compensation for decreases in patient volume which are beyond the hospital's control during the phase-in period. However, such compensation is not guaranteed beyond 1986.

The loan officer should also realize that those facilities which will be reimbursed prospectively may still pass through all reasonable capital expenses during the next three years (provided that the proposed capital projects are approved through the Certificate of Need process). However, by FY 1986, limited reimbursement for capital expenditures will likely be a strong deterrent to the undertaking of capital projects.

Health System Planning

As experience was gained with programs enacted during the 1960s (particularly with the Comprehensive Health Planning Act of 1966 and its regional medical programs), the inadequacies of health planning efforts became apparent. One of the greatest inadequacies was the comprehensive health planning (CHP) agencies' lack of authority or ability to sanction. Consequently, an attempt was made to give these organizations some control over investments made in the health services system by enacting P.L. 92-603 (an amendment to the Social Security Act) in 1972. Section 1122 of this law established a nationwide Certificate-of-Need (CON) program in order to control certain expenses related to capital investment. Section 1122, which would be administered by each state, mandated that providers of health care services would not be reimbursed for capital expenditures

by cost-based third-party payors unless they had received prior CON approval for the related capital expansion by a state-designated planning agency. For the next two years, the regional agencies set up by the Comprehensive Health Planning Act administered the CON program.

In 1974, The National Health Planning and Resources Development Act (NHPRDA - Public Law 93-641) was enacted in order to:

- further curb escalating health care costs and
- encourage each state to continue development and implementation of comprehensive health planning for the state as a whole as well as for regional and local areas.

Specifically, this legislation required the Secretary of Health, Education and Welfare (HEW) to develop:

- a uniform cost accounting and reporting system modified according to type and size of an institution
- a uniform system for calculating aggregate costs of operations
- a classification of health care facilities (according to size, geographical location, existence of professional training programs and complexity of services provided) in order to establish a basis for comparison
- a network of state and local agencies based largely on the planning regions developed by the Comprehensive Health Planning Act of 1966.

The health planning network includes local Health Systems Agencies (HSAs), one State Health Planning and Development Agency (SHPDA) and one Statewide Health Coordination Council (SHCC) per state. Together, these agencies are responsible for:

- reviewing applications for proposed capital expenditures
- reviewing and approving (or disapproving) health care facilities' applications for federal funds
- reviewing the appropriateness of existing services
- making recommendations for expansion, modernization or construction of health care facilities.

For the original purposes of these agencies, a capital expenditure was an expenditure which, under generally accepted accounting principles, was not chargeable as an operating or maintenance expense and which:

- exceeded $100,000 (although the amount varied somewhat among states)
- changed the bed capacity of the facility
- substantially altered the services offered by the facility.

Because the cost of studies, surveys, designs, specifications and all other activities related to a proposed project must be incorporated into the total cost, very few large expenditures have escaped review by these state agencies. This has had important implications for rural health care facilities because:

- they are often less experienced in substantiating a case in order to secure approval for a proposed capital expansion
- they must devote a certain amount of effort from a limited pool of resources toward such justification
- they have sometimes been prevented from adding equipment or services, due to the government's attempt to limit duplication of services already provided by larger institutions.

To date, the CON legislation has not been considered very effective in controlling unnecessary capital expenditures. President Carter intended to strengthen this review process in 1977 through his proposed Hospital Cost Containment Act. Instead, the Omnibus Budget Reconciliation Act, enacted by President Reagan, represented the first phase in the reduction of federal support for the present health planning system. Following is a summary of the major <u>planning</u> changes included in this legislation:

1) the total supply of funds for HSAs was cut dramatically. For example, the minimum amount which the federal government was required to grant to an HSA was reduced from $260,000 to $10,000.

2) states were given the option to take over the health planning process, eliminating HSAs. (Several had done so by 1982.)

3) suggested minimum dollar thresholds for CON reviews were raised to $250,000 for new services, $400,000 for equipment purchases and $600,000 for capital expenditures.

Clearly the above legislation has important implications for health care institutions. Not only will fewer resources (financial and personnel) be required to prepare CON applications, but health care managers will have greater latitude in deciding how to utilize capital funds.

Quality Control

Quality control is yet another activity which has been substantially influenced by government regulation. Although both the Medicare and Medicaid programs had required all health care providers to provide evidence of effective utilization control, ineffective institutional monitoring resulted in the establishment of Professional Standards Review Organizations (PSROs) in 1972. The primary responsibility of these organizations (which are now administered by the Health Care Financing Administration of HHS) is to ensure that all health care services (which are either partially or entirely reimbursed by government-controlled third-party payors) are medically necessary, are appropriately provided in the most economical settings and fulfill professionally recognized standards for care. Since 1972, PSROs have been required to review inpatient services of all institutions reimbursed by public third-party payors and ambulatory services when indicated. Their specific responsibilities include reviewing admissions to health care facilities, certifying the need for continuing treatment in an inpatient facility, reviewing other extended or costly treatment, conducting medical evaluation studies and reviewing facility and practitioner records.

In 1980, at the peak of their activity, there were 187 PSROs operating throughout the nation. However, their efficacy has never been entirely substantiated. In keeping with the Reagan Administration's support for deregulation of the health care delivery system, both the Omnibus Budget Reconciliation Act and TEFRA made provisions for the reduction of PSRO support. Specifically, the former act proposed to terminate financial support of all PSROs deemed to be ineffective and/or inefficient, designating that up to one-third of these organizations be phased out by 1983.

TEFRA took more drastic action, effectively terminating the present PSRO system (although it did not eliminate the requirements for peer review.) Until 1984, the PSROs which have not been phased out will continue to function, serving larger geographic areas. However, by FY 1984, quality review will be assumed by Peer Review Organizations (PROs). The government's intent is to consolidate peer review activities over broader geographic areas, thereby increasing efficiency and lowering cost. Whereas PSROs have always been federally controlled, PROs will be run by private organizations, including insurance companies, fiscal intermediaries, health care associations, etc. Although the "neutral party" concept which applied to PSROs has been eliminated, it will still be necessary for PROs to contract with the federal government in order to provide review services. It is difficult to postulate what effect the current trends in quality control will have on health care facilities, particularly those in rural areas. If, in fact, insurance companies do gain responsibility for this activity, perhaps some conflict will arise due to control of both quality review and payment by the same organizations.

In addition to third-party reimbursement, health care planning and quality control, there are several other issues which are currently

receiving considerable attention from the public as well as from those employed within the health care industry. The FmHA loan officer should certainly be generally aware of these issues because future developments will have a substantial influence on the evolution of health care in America.

Technological Changes

Technological developments will continue to play an important role in changing the way health care is provided. They will affect not only what will be done but also how it will be done. Some technological developments will create more demand for service and will increase the ability of providers to meet that demand. Other changes may improve the efficiency and the effectiveness of existing activities. Still other changes will reduce the demand for health care services or shift it from the hospital to other settings. For example, developments in computer applications are already affecting diagnosis, medical records, communications, treatment patterns, and use of staff.

Manpower Availability and Distribution

Substantial progress has been made during the past years toward alleviating the physician shortage. In fact, the AMA has recently expressed concern about the current over-supply of doctors. Nevertheless, there are still many regions of the country which are medically underserved, particularly rural areas and inner cities. Increased training and employment of allied health professionals (such as nurse practictioners and physicians assistants) have significantly improved the availability of services in these areas. However, attention has recently shifted from increasing absolute numbers of medical and para-medical professionals to providing incentives for more effective distribution.

Outpatient and Home Health Services

As the need to contain health care costs persists, the demand for outpatient and home health services increases. Consequently, many hospitals will be forced to prepare for a substantial increase in utilization of outpatient services and a corresponding decrease in inpatient utilization. Like outpatient services, home health services provide a more efficient and less costly way to deliver many essential health care services.

Health Maintenance Organizatons (HMOs)

An HMO is a health care organization which offers a full range of medical benefits on a prepaid per capita basis, regardless of the type and extent of services required by its members. The HMO concept was formally initiated by the Health Maintenance Organization Act of 1973, and there are now approximately 278 of these facilities operating throughout the country. Of these, 180 are federally qualified and therefore (1) are entitled to receive public financial assistance and (2) can obligate an employer (with over 25 employees) to offer the HMO's prepaid services as a health care insurance option.

During the past decade, the federal government has provided substantial grants, loans and loan guarantees for costs of construction and initial operations. Because HMOs are a less costly and more efficient alternative to the traditional mode of health care delivery, they represent a threat to the hospital industry, which operates on a "fee-for-service" basis. Despite the fact that the Reagan Administration is extremely supportive of the HMO system, it has recently made significant cuts in financial support with the intent of discontinuing it entirely by 1986. The major reason for this action is that the government believes it has

performed its galvanizing role and that HMOs are now in a position to continue providing high quality care in a competitive environment. The ever-increasing number of HMOs are providing hospitals with competion to which they must respond if they are to survive in the long run.

Multi-Hospital Systems

A recent development within the health care industry which will undoubtedly continue in the near future is the establishment of increasing numbers of multi-hospital systems. The major reasons for this trend are:

- to achieve economies of scale
- to improve access to resources (human, physical and capital)
- to gain a broader range of expertise (managerial and patient-related)
- fear for survival in this age of cost containment.

According to the AHA, by mid-1983, approximately 40% of the nation's short-term acute care hospitals had traded off a portion of their independence for the security provided by over 250 systems. The rate of growth is still rapid, suggesting that, by the end of the decade, over half of these facilities will have some sort of system affiliation through acquisition, merger or management contract. Although these systems are comprised of either non-profit or proprietary facilities, the non-profit sector has experienced a significant loss of beds and hospitals to the proprietary sector during the past two years.

While such affiliations may be the best (or only) alternative for some rural health care facilities, it is important for the FmHA loan officer to be cognizant of any possible changes in control of the applicant or borrower institution. When a facility receives financing from FmHA, it has ultimate responsibility for operating, maintaining, and managing the

facility, as well as for repayment of the loan. This responsibility shall still be exercised by the borrower even though the facility may be operated, maintained, or managed by a third party under contract, management agreement, or written lease. Mergers may only be accomplished within the appropriate FmHA regulations. Due to the inherent risks of losing control over a facility as a result of a system affiliation, all such proposals must be submitted in writing for prior approval by the FmHA State Director.

Preferred Provider Organizations

In the past, there has been little differentiation between high-cost and low-cost institutions in terms of reimbursement; hospitals have generally been reimbursed on the basis of actual costs incurred. However, public and private payors are reacting to increased health care costs by seeking ways to decrease their expenditures for high cost services. Specifically, third-party payors are either converting to a prospective payment system or establishing stringent reimbursement limits. As a result, the difference between high and low cost facilities is now being recognized.

Many low-cost providers are taking advantage of this situation by joining a Preferred Provider Organization (PPO). A PPO is a group of health care providers who unite for purposes of negotiating fees in exchange for a guaranteed volume of patients, thereby increasing their market shares. Generally, PPOs offer discounted rates in order to attract additional "customers". In our increasingly competitive health care system, purchasers of care now have the opportunity to negotiate with those who seem to do a better job, who offer a high quality of care at a relatively low price.

A hospital, physician group or third-party payor can organize a PPO by brokering selected providers' services at negotiated rates. This is done through a marketing process. In the case of a PPO comprised of a network of hospitals, those facilities' own staffs, physicians and services are marketed by a PPO administrator to prospective health care purchasers within the community. Generally, these purchasers are employers who provide their workers with health care benefits. Whether these benefits are provided through third-party insurers or self-insurance, employers have a strong incentive to contain their employees' health care expenditures. Consequently, they are eager to negotiate with providers who offer the best "package." PPOs market their services either directly to community employers or to insurance companies, which in turn offer them as a benefit package to employers.

PPOs offer distinct benefits to all involved parties. Specifically:

- hospitals and physicians acquire new sources of patients and income
- employers are able to offer an improved benefit package to their employees at a lower price
- private insurers can fund comparatively low-cost care, thereby avoiding raising premiums
- public insurers (Medicare and Medicaid) have the opportunity to provide their beneficiaries/recipients with reasonable health care from a dwindling pool of funds
- individuals may receive maximum insurance coverage if they patronize the preferred providers. Although patient participation in a PPO is never mandatory, the fact that one may have to assume a portion of his health care expenses if he uses a "non-preferred" provider creates a strong incentive to use the preferred option.

Clearly, many parties can benefit substantially from PPO services. However, those facilities which are not sufficiently efficient

to join PPOs may suffer severe financial hardships in the future. This issue is of particular relevance to rural health care facilities, as they are generally not as capable of containing costs through altering case mix, sharing services or applying economies of scale as are large, urban facilities. However, rural facilities may be in a position to affiliate with PPOs in neighboring service areas to protect their existing patient markets. The FmHA loan officer should be aware that increased PPO usage could diminish forecasted utilization of many rural facilities which are not affiliated with other providers.

In summary, each of the previously discussed issues will likely have a substantial impact on the health care industry in the future. It is essential that the FmHA loan officer be aware of developments in these areas, because many of them have the potential to influence the financial status of rural health facilities.

HEALTH CARE FACILITY CAPITAL FINANCING

Historical Financing Patterns

Sources of capital for construction of community health care facilities, particularly hospitals, have varied considerably during the past several decades. Until the passage of the Hill-Burton Hospital Survey and Construction Act in 1946, capital funds for private, non-profit hospitals came principally from philanthropy. Capital funding for federal, state and local hospitals was provided by the respective governmental unit.

From 1946 to 1972, the Hill-Burton program provided most of the federal assistance for modernization, planning, construction and equipping of health care facilities. During the late 1960s, its annual budget

reached approximately $200 million. Grants were provided for public and private facilities including general and specialty hospitals, out-patient facilities, public health centers, rehabilitation facilities and long-term care facilities. The program was further expanded in 1970 by an amendment which authorized $1.5 billion in loan guarantees for private, non-profit facilities and direct loans for construction of public facilities over a three-year period beginning in 1971. Between 1946 and 1974, a total of over $3.7 billion was spent on construction of health care facilities. Over 70% of those funds were used for general hospital construction.

In 1974, Congress drastically curtailed the Hill-Burton program, recognizing that an excessive number of hospital beds had been built. In that year, the following changes were incorporated into the National Health Planning and Resource Development Act:

1) Many grants would be discontinued, leaving borrowed funds as the major means for modernization or replacement of outmoded facilities. (Loans would either be made directly by the Hill-Burton program or guaranteed by it.)

2) A 3% interest subsidy for guaranteed loans to public and private health care facilities would be provided.

Although the focus of the Hill-Burton financial assistance program (during both the grant and loan phases) was primarily on capital expansion of hospitals, assistance was also provided to other types of qualified health care institutions. In addition to Hill-Burton, there have been many other federal programs which have provided funds to health care facilities. However, in keeping with the trend toward deregulation of the health care industry, most of them are now defunct. Currently, there are only a few public programs which provide either grants or loans (not just loan guarantees) to rural institutions. Among them are:

The Health Maintenance Organization Act of 1973, which still authorizes grants and loans for initial planning, development and operation of non-profit HMOs. In addition, loan guarantees are also available to proprietary HMOs which are willing to serve medically underserved populations. However, such assistance will be tapered in the future and eliminated entirely by 1986.

Since the early 1970's the Appalachian Regional Commission (ARC) has made substantial grants to non-profit private and public facilities for the establishment of primary care clinics, nutrition services, emergency medical services and home health care delivery. However, the Reagan Administration has recently withdrawn support from the ARC, leaving it with only $2.5 million to allocate among Appalachian facilities in 1983. This reduction has important implications for many of the rural hospitals located in Appalachia.

President Reagan's Jobs Bill, passed in 1983, authorized $360 million in grant provisions for selected ambulatory facilities such as migrant clinics, community mental health clinics and comprehensive community health centers.

The Community Facilities Loan Program (administered by the Farmers Home Administration of the Department of Agriculture) provides loans to hospitals, nursing homes and ambulatory clinics in communities of 20,000 people or less. This program was authorized through the Rural Development Act in 1972. Public and private non-profit institutions are eligible for loans to build, enlarge, modernize and/or equip their facilities.

In summary, the Hill Burton Program had provided most of the loans and grants for health care facility construction and renovation up

until the early 1970's. However, this program was completely discontinued in September of 1976. Since then, the federal government has provided very few grants or loans for these purposes. Occasionally, financial assistance is provided when the Secretary of HHS determines that the proposed construction or improvement is essential and that no private source of funding is available. For example, the Omnibus Budget Reconciliation Act of 1981 extended the coverage of the HMO Act of 1972, making provisions for HMO grants and loans up until 1986 to ensure that the HMO system would be well-established.

There are several other divisions within the federal government currently assisting in the loan process, but only as guarantors of mortgage insurance. An example is the Federal Housing Administration (Department of Housing and Urban Department).

During the past decade, there has been an urgent need to update facilities through capital expenditutres. Because few grants are now available, many health care institutions must turn to private financing, particularly bond issues. 1/ This has been a reasonably attractive financing alternative because the major third-party payors have adequately reimbursed capital expenditures (including financing costs) in the past. The dramatic shift from the reliance on philanthropy and retained earnings for capital expansion to use of debt financing during the past two decades is illustrated in Table II-11. Of all capital funds used for construction

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1/ Cost reimbursement payors generally include a depreciation allowance and payment for interest expense but do not pay for direct amortization of the principal costs. Usually, there is no requirement by third party payors that the depreciation account be funded. This means that as long as the current depreciation allowance exceeds debt payment, additional funds are available in the short-term to finance capital improvement.

in the hospital industry, 38.1% were secured through philanthropy in 1962, 9.9% in 1973 and only 3.9% in 1981. Use of debt, on the other hand, has increased dramatically from 17.5% in 1962 to 54.4% in 1973, and to 69.1% in 1981. Reliance on retained earnings and government grants for capital expansion declined during this time period.

The trend toward use of debt financing was facilitated by an Internal Revenue Service ruling in 1963 that permitted private hospitals to issue tax-exempt bonds if the title to the financial project ultimately reverted to the supporting municipality upon repayment of the debt. However, all states have since created special authorities to make tax-exempt hospital financing available with title to the facility remaining with the hospital authority.

The result of the steadily increasing need for hospital renovation coupled with the marked shift to debt financing has been a substantial increase in the overall cost of capital improvements. When a facility received its capital funds from donations, endowments, grants or equity financing, there were no financing costs incurred. Debt financing, on the other hand, generates interest and principal amortization costs which, in turn, increase reimbursement rates and/or charges.

The CON process was instituted in 1974 in an effort to contain skyrocketing costs of capital improvements. The current plan to include capital-related costs in the prospective payment system by 1986 is the most recent attempt by Congress to curtail rising capital costs in the health care industry.

Financial Reporting

Health care facility accounting procedures differ in a number of significant ways from those of other businesses. First, because most of

these facilities are operated as public or private non-profit institutions, they are exempt from many of the taxes imposed on proprietary institutions. Nursing homes are an exception, as most of these facilities are proprietary in nature and therefore operate in much the same way as other for-profit businesses. Without the traditional profit maximization objective, the major criterion for success is generally the extent to which the facility serves the needs of the community and maintains a high quality of services at a reasonable cost. Many hospitals have decided to change their corporate structures for reimbursement, planning, or marketing purposes. Corporate reorganizations are not limited to large hospitals; they may also be undertaken by smaller hospitals. A typical result of a corporate restructuring is that the original entity, which may have consisted of only a hospital, becomes affiliated with a real estate company, a data processing organization, a management company, or some other organization not directly involved with patient care.

Secondly, as noted earlier, health care facilities receive funds from a variety of sources (i.e. fund-raising, donations, endowments, grants, third-party payors, self-payors and debt instruments). When funds from all of these sources are allocated among departments, operations or projects, the accounting system becomes extremely complicated. Therefore, in the health care industry, it is generally necessary to maintain a seperate fund account for each distinct phase of financial activity.

Third, health care facilities have not generally denied care to those who have needed it, regardless of a patient's ability to pay. As a result, the percentage of unpaid bills is often much higher that it is for commercial business.

Fourth, a facility must have substantial standby resource capacity in order to meet an emergency demand for services. Although such resources may be used infrequently, they add significantly to the cost of operations.

Because health care facilities serve as workshops for physicians, the extent and quality of services offered significantly influence the caliber of physicians attracted to their medical staffs. Competition among facilities for capable physicians, other health care professionals and para-professionals can become very intense, particularily in a medically underserved area. As a result, many hospitals must provide extensive and costly equipment in order to attract capable physicians and retain their viability.

A final way in which non-profit health care facilities differ from proprietary businesses is the use of a complicated cost allocation system which "steps down" costs from one non-revenue producing department to another and then from non-revenue producing departments to those which are revenue producing. At the end of this allocation process, only revenue producing departments assume expenses, each according to its direct expenses and its proportionate use of non-revenue producing services. By identifying the services which are costly but not highly profitable, an institution can decrease expenditures and therefore increase its profitability.

The federal government influences the financial activities of health care facilities by conditioning reimbursement on:

- license to operate
- certificate-of-need application for certain capital expenditures
- quality assurance and utilization review through internal programs or PSROs/PROs

- assurance of adequate accounting
- statistical reporting.

In addition to the government, professional organizations such as the Hospital Financial Management Association (HFMA) and the American Hospital Association (AHA) have continually encouraged greater uniformity of hospital reporting methods. Achieving consistent reporting is a worthy goal as it provides facilities with a standard for measuring performance over time. Uniformity does not mean that all health care institutions' reporting systems must be identical and that there is no room for adaptation to accommodate the needs of the specific institution. Some consistency, however, is needed so that legitimate institutional comparisons can be made by third party payors, other regulatory bodies and potential lenders.

There is a clear need for uniformity in the type and quality of information required of FmHA loan applicants to permit appropriate risk assessment of prospective borrowers. Stringent application of these criteria should enable FmHA to conduct comparative reviews of applications, permitting refinement of risk assessment and loan monitoring procedures.

FARMERS HOME ADMINISTRATION

TABLE II-1

TRENDS IN NATIONAL HEALTH CARE EXPENDITURES
FOR SELECTED FISCAL YEARS
(IN BILLIONS OF DOLLARS)

YEAR	ALL HEALTH EXPENDITURES	PERCENT OF GNP	PERSONAL HEALTH CARE EXPENDITURES (A) TOTAL PERSONAL HEALTH CARE EXPENDITURES	PRIVATE	PUBLIC	FEDERAL PORTION OF PUBLIC	MEDICARE & MEDICAID PORTION OF PUBLIC
1950	12.0	4.5	10.4	8.3	2.1	1.0	NA (B)
1960	25.9	5.2	22.7	17.8	4.9	2.1	NA
1965	38.9	5.9	33.5	26.5	7.0	2.8	NA
1970	69.2	7.2	60.1	39.6	20.5	13.4	9.4
1975	122.2	8.4	105.8	63.8	42.0	28.9	21.2
1980	249.0	9.5	219.0	126.3	92.7	71.1	49.5
1981	286.6	10.1	255.0	146.1	108.9	83.9	59.9

NOTE A: Expenditures for personal health care include all expenditures for health services and supplies except those for prepayment, administration, research, construction and government public health activities.

NOTE B: NA - not applicable (Medicare and Medicaid programs did not take effect until 1966.

SOURCE: 1) SOCIAL SECURITY ADMINISTRATION (OFFICE OF RRESEARCH AND STATISTICS)
2) THE BUDGET OF THE U.S. GOVERNMENT (FY 1978)
3) HEALTH CARE FINANCING ADMINISTRATION, NATIONAL COST ESTIMATES

FARMERS HOME ADMINISTRATION

TABLE II-2

FACTORS CONTRIBUTING TO THE INCREASE IN PERSONAL HEALTH CARE EXPENDITURES
FOR SELECTED TIME PERIODS (FY 1950-1981)

SOURCE OF INCREASE	1950-65	1966-71	1972-74 (A)	1975-76	1977-79	1980-81	TOTAL INCREASE 1950-81
A. INCREASE IN BILLIONS OF DOLLARS							
1) Price	10.1	16.8	10.4	22.8	38.8	46.9	145.8
2) Population	4.9	3.0	1.9	1.7	5.1	4.6	21.2
3) Quantity & Quality (Utilization & Intensity)	8.1	13.9	11.8	4.6	13.1	14.5	66.0
TOTAL INCREASE	23.1	33.7	24.1	29.1	57.0	66.0	233.0
B. PERCENT DISTRIBUTION							
1) Price	43.8	49.9	43.1	78.3	68.0	71.0	59.0
2) Population	21.0	8.9	7.9	5.8	9.0	7.0	9.9
3) Quantity & Quality (Utilization & Intensity)	35.2	41.2	49.0	15.9	23.0	22.0	31.1
TOTAL INCREASE	100.0	100.0	100.0	100.0	100.0	100.0	100.0

NOTE A: - August 1971 - April 1974 - Economic Stabilization Period

SOURCES: 1950-1976 DATA 1) SOCIAL SECURITY BULLETIN, "NATIONAL HEALTH EXPENDITURES, FY 1976," ROBERT GIBSON AND MARJORIE MUELLER, APRIL 1977, pp. 3-22.

1976-1981 DATA 2) HEALTH CARE FINANCING ADMINISTRATION, NATIONAL COST ESTIMATES.

FARMERS HOME ADMINISTRATION

TABLE II-3

AVERAGE ANNUAL PERCENT CHANGE IN CONSUMER PRICES

FOR SELECTED FISCAL YEARS (A) (1950-1982)

YEARS	CHANGE IN CPI FOR: (ALL ITEMS)(B)	MEDICAL CARE SERVICES
1950-1960	1.9%	ND (C)
1961-1966	1.1	2.9
1967-1970	3.8	5.6
1971	3.4	5.3
1972	3.4	3.8
1973	8.8	5.8
1974	12.2	13.3
1975	7.0	10.3
1976	4.8	10.7
1977	6.8	9.0
1978	9.0	9.2
1979	13.3	10.6
1980	12.4	10.0
1981	8.9	12.7
1982	3.9	11.2

NOTE (A) - EACH FISCAL YEAR EXTENDS FROM OCTOBER 1 THROUGH SEPTEMBER 30
NOTE (B) - CPI INCLUDES MARKETBASKET OF ITEMS FOR THE OVERALL U.S. ECONOMY
NOTE (C) - ND- NO DATA AVAILABLE BEFORE 1957

SOURCES: 1) BUREAU OF LABOR STATISTICS, CPI DIVISION

2) HCFA, NATIONAL COST ESTIMATES

FARMERS HOME ADMINISTRATION

TABLE II-4

TRENDS IN UTILIZATION OF U.S. HOSPITALS[A]
FOR SELECTED YEARS (1950-1981)

YEAR	HOSPITAL ADMISSIONS (B)	OUTPATIENT VISITS
1950	121.8	ND (C)
1960	139.0	ND
1965	148.3	647.4
1970	154.4	887.6
1975	167.4	1,180.0
1980	171.7	1,160.7
1981	170.4	1,154.6

NOTE A: INCLUDES ALL HOSPITALS IN U.S. REGISTERED WITH AHA

NOTE B: PER THOUSAND POPULATION

NOTE C: ND - NO DATA AVAILABLE BEFORE 1965.

SOURCES: 1) U.S. CENSUS BUREAU

2) AHA HOSPITAL STATISTICS GUIDE, 1982 EDITION

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TABLE II-5

TRENDS IN NUMBERS OF SHORT-TERM COMMUNITY HOSPITAL BEDS
AND HOSPITAL PERSONNEL FOR SELECTED YEARS (FY 1950-1981)

YEAR	BEDS (IN THOUSANDS)	BEDS PER 1,000 POPULATION	FULL-TIME EMPLOYEES [3] PER AVERAGE DAILY CENSUS FTE/ADC
1950	505	3.3	.84
1960	639	3.5	1.14
1965	741	3.8	1.39
1970	848	4.1	1.95
1975	947	4.4	2.69
1980	1,052	4.6	3.29
1981	1,111	4.8	3.45

SOURCES: 1950-1975 DATA 1) AHA HOSPITAL STATISTICS, 1976 EDITION

1980-1981 DATA 2) AHA HOSPITAL STATISTICS, 1982 EDITION

3) AHA, WASHINGTON OFFICE

FARMERS HOME ADMINISTRATION

TABLE II-6

GROWTH TRENDS FOR ALL HEALTH PROFESSIONS AND SELECTED OCCUPATIONS
IN FIVE-YEAR INCREMENTS (1960-1980)

YEAR	ALL HEALTH PROFESSIONS (A)	PHYSICIANS (B)	DENTISTS	REGISTERED NURSES (C)
		NUMBERS ACTIVE (IN THOUSANDS)		
1960	1,011.9	259.5	90.1	527
1965	1,167.6	288.7	96.0	621
1970	1,329.1	323.2	102.2	750
1975	1,574.8	375.3	112.4	906
1980	2,057.0	426.0	140.0	1,302
		NUMBER PER 1,000 POPULATION		
1960	5.6	1.4	.50	2.9
1965	6.0	1.5	.49	3.2
1970	6.5	1.6	.50	3.7
1975	7.4	1.8	.52	4.2
1980	9.1	1.9	.60	5.7

NOTE A: INCLUDES PHYSICIANS, DENTISTS, REGISTERED NURSES, OPTOMETRISTS, PODIATRISTS, PHARMACISTS AND VETERINARIANS.
NOTE B: INCLUDES MEDICAL DOCTORS AND DOCTORS OF OSTEOPATHY.
NOTE C: INCLUDES FULL-TIME AND PART-TIME REGISTERED NURSES.

SOURCES: 1960-1975 DATA 1) THE SUPPLY OF HEALTH MANPOWER: 1970 PROFILES AND PROJECTIONS TO 1990, ADAPTED FROM DHEW, 1975. (TABLE 5, P. 15)

1980 DATA 2) BUREAU OF LABOR STATISTICS, OFFICE OF ECONOMIC GROWTH.

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TABLE II-7

HOSPITAL EXPENDITURES AS A PERCENT OF TOTAL NATIONAL HEALTH CARE EXPENDITURES FOR SELECTED YEARS (FY 1940-1981)

YEAR	TOTAL NATIONAL HEALTH EXPENDITURES (MILLIONS OF DOLLARS)	HOSPITAL CARE (MILLIONS OF DOLLARS)	HOSPITAL CARE AS A PERCENT OF TOTAL
1940	3,883	969	25.0
1950	12,027	3,698	30.7
1960	25,856	8,499	32.9
1965	38,892	13,152	33.8
1970	69,201	25,879	37.4
1976	139,312	55,400	39.8
1980	249,000	100,400	40.3
1981	286,600	118,000	41.2

SOURCES: 1940-1976 DATA 1) SOCIAL SECURITY BULLETIN, "NATIONAL HEALTH EXPENDITURES, FY 1976," ROBERT GIBSON AND MARJORIE MUELLER, APRIL 1977, P. 15

1980-1981 DATA 2) HEALTH CARE FINANCING ADMINISTRATION, NATIONAL COST ESTIMATES.

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TABLE II-8

AVERAGE ANNUAL RATES OF PRICE INCREASE

	1959-66 (PRE-MEDICARE)	1967-7/1971 (POST-MEDICARE)	8/1971-4/1974 (CONTROLS)	5/1974-12/1974 (POST-CONTROLS)	1975-76	1976-79	1980-82
CPI (FOR ALL SERVICES, LESS MEDICAL CARE)	2.0%	5.8%	5.2%	9.5%	7.7%	8.4%	8.3%
CPI (FOR MEDICAL CARE SERVICES)	3.2	7.9	4.9	12.1	10.3	9.9	11.3
HOSPITAL ROOM CHARGES	6.0	14.8	5.7	16.9	14.7	11.8	14.7
PHYSICIAN SERVICES	2.9	6.9	4.0	12.8	11.8	9.1	10.1
DENTAL SERVICES	2.3	5.9	4.2	9.6	7.8	7.8	8.9
MEDICAL CARE COMMODITIES (DRUGS AND PRESCRIPTIONS)	-0.7	1.0	0.7	7.8	7.4	6.9	10.3

SOURCES: 1959-1975 DATA 1) STAFF REPORT FOR COUNCIL ON WAGE AND PRICE STABILITY, "THE PROBLEM OF RISING HEALTH CARE COST," APRIL 1976, P. 7, BUREAU OF LABOR STATISTICS

1976-1982 DATA 2) HEALTH CARE FINANCE ADMINISTRATION, NATIONAL COST ESTIMATES

FARMERS HOME ADMINISTRATION

TABLE II-9

AVERAGE COST/PATIENT DAY
IN CURRENT DOLLARS AND 1967 DOLLARS
(FOR COMMUNITY HOSPITALS ONLY)

YEAR	AVERAGE COST PER PATIENT DAY, CURRENT DOLLARS (ACPPD)	CONSUMER PRICE INDEX, 1967 = 1.00 (CPI)	AVERAGE COST PER PATIENT DAY, 1967 DOLLARS (ACPPD/CPI)
1950	$ 15.62	.721	$ 21.66
1955	23.12	.802	28.83
1960	32.23	.887	36.34
1963	38.91	.917	42.43
1966	48.15	.972	49.54
1969	70.03	1.098	63.78
1970	81.01	1.163	69.66
1971	92.31	1.213	76.10
1972	94.87	1.253	75.71
1973	102.44	1.331	76.96
1974	113.55	1.477	76.88
1975	133.81	1.612	83.00
1976	152.76	1.705	89.10
1977	173.98	1.815	95.86
1978	194.34	1.954	99.46
1979	217.34	2.179	99.97
1980	245.12	2.468	99.32
1981	284.33	2.724	104.38

SOURCES: 1950-1971 DATA 1) STAFF REPORT FOR COUNCIL ON WAGE AND PRICE STABILITY, BUREAU OF LABOR STATISTICS

1972-1981 DATA 2) BUREAU OF LABOR STATISTICS, CPI INFORMATION

3) AHA HOSPITAL STATISTICS, 1982 EDITION

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TABLE II-10

ANNUAL PERCENTAGE CHANGES IN COST/PATIENT DAY

FOR FISCAL YEARS(A) 1950-1981

YEARS	PERCENTAGE CHANGE (USING CURRENT DOLLARS)	PERCENTAGE CHANGE (USING REAL DOLLARS)
1950-1955	9.6%	6.6%
1956-1960	7.8	5.2
1961-1963	6.9	5.5
1964-1966	7.9	5.5
1967-1969	15.1	9.5
1970	15.7	9.2
1971	13.9	9.2
1972	14.0	-0.5
1973	8.0	1.7
1974	10.8	-0.1
1975	17.8	8.0
1976	14.3	8.0
1977	13.9	7.0
1978	11.7	3.8
1979	11.8	0.5
1980	12.8	-0.7
1981	16.0	5.1

NOTE A - EACH FISCAL YEAR EXTENDS FROM OCTOBER 1 THROUGH SEPTEMBER 30

SOURCES: 1950-1971 DATA 1) STAFF REPORT FOR COUNCIL ON WAGE AND PRICE STABILITY, BUREAU OF LABOR STATISTICS

1972-1981 DATA 2) BUREAU OF LABOR STATISTICS, CPI INFORMATION

3) AHA HOSPITAL STATISTICS, 1982 EDITION

TABLE II-11

FmHA

CHANGE IN CAPITAL STRUCTURE FOR
NON-PROFIT HOSPITAL CONSTRUCTION

	PERCENTAGE OF TOTAL CONSTRUCTION FUNDS				
SOURCE OF CAPITAL	1962	1973	PERCENT CHANGE FROM 1962-1973	1981	PERCENT CHANGE FROM 1973-1981
DEBT	17.5%	54.4%	+210%	69.1%	+27%
RETAINED EARNINGS	34.6	14.9	-60	14.9	± 0
PHILANTHROPY	38.1	9.9	-74	3.9	-61
GOVERNMENT GRANTS	9.8	20.8	+113	12.1	-42
TOTAL	100.0	100.0		100.0	

SOURCES: "Survey of Sources for Hospital Construction", Funding Aspects of Construction in U.S. Hospitals, AHA, 1981
"Trends in the Financing of Hospital Construction", Hospitals, July 1, 1979
"Resource Allocation in the Hospital Industry: The Role of Capital Financing", Social Security Bulletin, October 1972

III. OVERVIEW OF LOAN APPLICATION ANALYSIS

INTRODUCTION

The purpose of this Chapter is to provide an overall framework within which the financial feasibility of a FmHA application can be evaluated. The principles and methods outlined in this and the remaining chapters of this manual are intended to serve as guidelines for the FmHA loan officer to use in reviewing applications for proposed health care facility projects. They are not to be interpreted as official Community Facilities Division or Farmers Home Administration policy, but rather as a form of technical assistance which should be useful to loan officers in fulfilling their risk assessment responsibilities.

CAPITAL BUDGETING

Initiation of Project

The actual FmHA application process is the last of a series of steps which must be taken by the applicant. First, the need for a new, expanded or renovated health care facility must be made apparent to the administrator and/or his policymaking board. Factors which may instigate the planning process are:

- The need to fulfill licensure, accreditation or building code requirements
- Community requests for more accessible service

- Requests by key organizational members to upgrade the quality of the facility.

In a community which is medically underserved, citizens may appoint an ad hoc group of community leaders to serve as their representatives until an appropriate legal entity is found to guide project development.

A preliminary feasibility assessment may be made by either the administration or a consultant to ascertain whether:

- The need is as critical as it initially appeared and
- Adequate resources are available to undertake the project.

Findings are subsequently presented to the policymaking body (or ad hoc community group in the case of a new facility) which will make the final decision as to whether the situation warrants an indepth feasibility study.

Assuming there are reasonable grounds to proceed, a full feasibility study is usually undertaken by an experienced, independent consultant, and preliminary feedback is obtained from the financial community regarding the availability of the necessary financing. Upon approval by the policymaking board of the sponsoring organization, the project is incorporated into the capital budget (which generally projects capital expenditures for a five-year period). A forecasted operating budget should also have been developed to provide a direct correlation between construction and operating/maintenance expenses (see Chapter VI).

If private financing is a possibility, formal presentations are made to banks and investment firms. However, if the organization encounters resistance in the form of direct refusals or unacceptable conditions (or if its preliminary feedback from the financial community indicates unavailability of financing) preapplication discussions may be

initiated with the USDA County Supervisor. The details of the processing of FmHA applications are described in FmHA Instruction 1942-A dated Jan 1, 1979 and as subsequently amended.

If the "Notice of Preapplication Review Action," Form AD-622, is favorable, the organization may begin preparing a formal "Application for Federal Assistance (For Construction Programs)," Form AD-624, for submittal to the District Director. In so doing, it is vitally important that all appropriate costs associated with the acquisition, construction, expansion, or renovation are included in the project's total cost in order to ensure its financial viability once it becomes operational.

Cost Determination

Fixed assets consist of all tangible property, including land and associated improvements, buildings, plant renovation, and major equipment. Usually, such assets are actively used in the facility's operation (not acquired solely as an investment or for resale), are relatively long-lived and are difficult to convert to cash quickly.

Capital expenditure is the term used to denote the acquisition of such an asset, the benefit of which extends over more than one future accounting period. When additions are made to a fixed asset account, they are said to be capitalized.

To determine total acquisition costs of land, buildings, and equipment, the following specific costs should be included: 1/

1/ Adapted from Welsch, Glenn A., Zlatkovich, Charles T., and White, John Arch, Intermediate Accounting, (Homewood, IL: Richard D. Irwin, Inc., 1976), pp. 513-514.

Land

- Contract price
- Brokers' commissions
- Legal fees for examining and recording ownership
- Cost of ownership guarantee insurance policies
- Cost of real estate surveys
- Cost of options (when exercised)
- Paving assessment
- Cost of razing an old building (net of any salvage)
- Cost of cancellation of an unexpired lease
- Payment of all taxes accrued on the land prior to date of purchase, if payable by the owner.

The cost of land does not include fees for disposal of refuse, maintenance, or improvements associated with easements or rights of way for which there are time limits (such as road and sidewalk repairs). Furthermore, if the land is not ultimately purchased, fees for surveying, ownership searches, geological opinions and other legal and expert services should not be included.

Buildings

- Contract price or cost of construction
- Expenses incurred in remodeling, reconditioning, or altering a purchased building to make it available for the purpose for which it was acquired
- Cost of excavation, grading, or filling of land for erection of buildings
- Expenses incurred for the preparation of plans, specifications, and blueprints
- Cost of building permits
- Payment of taxes accrued on the building prior to date of purchase, if payable by owner

- Architects' and engineers' fees for design and supervision
- Costs of other preparations such as rock blasting, piling, or relocation of the channel of an underground stream
- Cost of connecting facility to utility systems and installing appropriate equipment.

The cost of a building should not include extraordinary costs incidental to the erection of a building (such as those caused by strike, flood, fire, or other casualty) or the cost of abandoned construction. Also, razing costs of a building that has been used previously by the applicant should be identified with the retirement of the old building.

Machinery, Furniture, Fixtures, and Equipment

- Contract or invoice cost
- Freight-in handling and storage costs
- Specific in-transit insurance charges
- Sales, use, and other taxes imposed on the acquisition
- Cost of preparing a proper site for the asset
- Installation charges including company overhead on the same basis as it is charged to inventory
- Charges for testing and preparation for use
- Costs for reconditioning used items when purchased.

FINANCIAL FEASIBILITY STUDY

The purposes of a fiancial feasibility study are to determine:

- The amount of funding required for a proposed capital expenditure
- The ability of the applicant to generate sufficient funds to meet its added debt obligations in addition to current operating expenses.

The loan specialist must examine the financial structure of the institution to ensure that the facility is not overextending its resources, operating

efficiencies are not sacrificed, and the quality of patient care is not jeopardized. In so doing, it is essential to consider all possible sources of information, including current studies carried out by government agencies, nonprofit research organizations, health care associations, and the health care institutions themselves.

Demand Analysis

A complete financial feasibility study should be based upon a specific forecast of the demand for an applicant's proposed services. Accurate forecasts of patient volumes and services must precede the financial analysis of a proposed capital expenditure because these forecasts measure the future utilization of a facility's services. (Inpatient occupancy rates, number of outpatient visits made during a specific period, and usage of major services are typical indicators of utilization.) The tasks performed in a typical market demand study include:

- Assessment of the medical staff's attitude toward the proposed project
- Profile of the administrators, trustees, and medical staff, reflecting the capabilities and resources of each group and how they will affect the overall success of the project
- Identification of a service area within which the institution is/will be the major provider of services
- Identification of competition for the proposed services that exists within the service area
- Proposed expansion plans of competitive health care facilities to assess their future impact on the institution's project
- Examination of the service area population trends and economic factors which will influence the area's growth rate
- Analysis of current and historical utilization of all hospitals in, and adjacent to, the service area

- A calculation of the current use rates for the service area population, using utilization and population data
- A forecast of facility utilization based on the preceding information.

Financial Analysis

The key elements to consider when evaluating a financial forecast are the degree of objectivity used in its preparation and whether the appropriate factors were considered. Every analysis should be accompanied by a complete justification of the rationale used in making the assumptions upon which the forecasts are based. Factors typically included in a financial feasibility analysis are:

- Historical and current financial information for the applicant institution
- Forecasted demand for services and a forecast of all resources required to meet that increased demand
- Forecasted financial statements (income and expense, cash flow, balance sheet, and changes in fund balance)
- Relationship between cash flow available for debt service and the debt obligations that will result from a loan
- Forecast of revenues to be generated by groups of payors. These estimates should be based on policies and practices of third-party payors, the facility's forecasted charge structure, and historical levels of bad debts
- Assessment of the elasticity of demand in relation to rate increases.

Management Analysis

The third critical component of a financial feasibility study is assessment of management's ability to administer the proposed plans for resource expansion. The importance of this factor should not be minimized. For example, a 1976 study by HEW cited inadequate management as one of the major reasons for termination of plans to build HMOs during the early

phases of development. Although the findings of this study applied only to HMOs, the same principles are applicable to all types of health care facilities. Key factors to consider when evaluating the ability of management to administer plans for capital expansion are:

- Financial background and training of individual trustees
- Managerial and financial experience of key administrative staff
- Commitment of trustees and management to the project
- Fund-raising history of management
- Effectiveness of budgeting, accounting, and management information systems
- Third-party payor and vendor opinions on the institution's financial management and payment systems
- Credit history
- Staff turnover in key positions.

LOAN APPLICATION ANALYSIS

The degree to which an FmHA loan officer should consider the factors cited in the previous sections depends on the type and size of loan requested, the reputation of the facility, the type of project being undertaken, and the completeness of the information submitted to FmHA. Coinciding with the filing of an application with FmHA, the applicant should have received, or be near receiving, project approvals from the appropriate state and local review agencies (if their review is required). An affirmative recommendation by the local HSA, its acceptance by the state agency (SHPDA) and any additional intergovernmental consultation 1/ by

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1/ Intergovernmental consultation is to be performed in accordance with 7CFR, Part 3015, Subpart V, "Intergovernmental Review of Department of Agriculture Programs and Activities."

state or local governments are required before the processing of a formal FmHA application can begin.

Use of Funds

FmHA loans may be used for:

- Several relatively small expenditures which may or may not involve service changes
- Large-scale expansions substantially affecting service delivery
- A small capital expenditure absolutely (but large relative to the facility's size)
- A small capital project in relation to the facility's size (which suggests that the facility may have debt servicing problems).

During the past decade, Congress has enacted several pieces of legislation to ensure that federal funds would be used only by financially stable institutions and for appropriate purposes. For example, the Social Security Amendments of 1972 (P.L. 92-603, Section 234) required that, in order to participate in the Medicare program, each institutional provider must have a written overall plan and budget covering at least a one-year period of operations and a three-year period for capital expenditures. The capital expenditure plan must identify in detail the anticipated sources of financing for each proposed expenditure in excess of $600,000 related to the acquisition or improvement of land, buildings, or equipment. In addition, Section 1122 of the same amendments required that federal funds appropriated by Medicare, Medicaid, and the Maternal and Child Health programs would not be used to support unnecessary capital expenditures, and that all expenditures would support state health plans.

The Secretary of HHS is authorized to refuse reimbursement to a provider for any costs associated with a capital expenditure not approved by the SHPDA. Such costs include any amount attributable to depreciation, interest on borrowed funds, return on equity in the case of proprietary

facilities, in addition to all other directly related expenses. However, as previously mentioned, the Omnibus Budget Reconciliation Act of 1981 raised the thresholds for review to $250,000 for new services, $400,000 for equipment purchases, and $600,000 for capital expenditures. As a consequence, HHS will have less control over capital expenditures, leaving determination of appropriate funds usage largely to the discretion of individual facilities.

Clearly, local HSAs and HHS will be reviewing fewer health care proposals due to increased review thresholds. As a result, proposed projects of many FmHA loan applicants will not have been reviewed by the government at all. In addition, many facilities interested in relatively small loans lack experience in applying for federal assistance. Therefore, the FmHA loan officer is now obligated to perform more thorough financial assessments, indicating a need for increased knowledge of the health care delivery system. Ironically, a facility interested in a smaller loan may require greater scrutiny on the part of a loan officer than one interested in a large loan.

When loan applications are submitted to FmHA, the loan officer must determine whether sufficient funds are actually available within the existing operating budget. If not, he must ascertain whether the applicant will be able to generate sufficient revenue during the construction and pay-out period to cover amortization and interest payments. He must also consider whether there are less costly but equally viable alternatives that would achieve the same purpose as the proposed project, and whether an extensive financial feasibility study is indicated.

Regardless of whether a CON application must be filed, it will be necessary for the loan officer to employ the same basic analytic process outlined in the remaining chapters of this manual. Again, the focus of the

loan specialist may vary according to a number of factors. Due to insufficient and/or inexperienced management in some of the smaller facilities, he may have to verify and supplement a considerable amount of the submitted information. Sources which can be used for verification and supplementation are the local HSAs, the local financial community, local planning commissions, hospital councils, professional organizations, vendors associated with the facility and knowledgeable private citizens in the community. Once the credibility of the information contained in the application has been established, evaluation of a loan application should be fairly simple and straight forward.

If financial feasibility studies for larger projects have been done by independent consultants, most of the essential elements will probably have been considered already. Nevertheless, to ensure that the consultant's study is unbiased, the FmHA loan officer should perform the analyses outlined in this manual. His reliance on questionable information should be guided by his knowledge of:

- The degree of independence between the consultant and the applicant institution. If it is suspected that the consultant may benefit from the proposed project, his studies should be examined more closely. Where analytical methods deviate significantly from those outlined later in this manual, information related to them should be independently verified.

- The experience of the consulting team in performing similar types of work. If experience is lacking, or if the quality of previous work has been unsatisfactory, sources of information and study methodology should be examined in detail.

- The assumptions which the consultant has made concerning utilization trends, financial forecasts, physician recruitment, amount of competition, community need, capabilities of the management staff and management turnover.

CONCLUSION

Although a certain amount of information verification is indicated for all applications, the FmHA loan officer will likely concentrate on feasibility determination rather than substantiation, where large, reputable institutions requesting large amounts of money are concerned. The applications of small, inexperienced facilities which have not been reviewed by a consultant or public agency will probably require significant verification.

The remainder of this manual deals with the kinds of information the FmHA loan officer requires in order to make the type of in-depth analysis described above. Each chapter is self-contained, so the more experienced reader may want to refer directly to chapters relevant to his needs or begin immediately to utilize the Feasibility Checklists at the conclusion of this manual. The following chapter contains a description of the kinds of information needed as a basis for demand, financial, and managerial analyses.

IV. DESCRIPTION OF PROPOSED PROJECT

INTRODUCTION

The purpose of this chapter is to describe basic project information that the FmHA loan officer should have available in order to properly assess the financial feasibility of an applicant's proposed project. In the case of applications for large loans, most of this information will already have been provided by the applicant to other governmental or quasi-governmental agencies through the CON process. However, some additional information should usually be sought in order to protect FmHA against possible fraud or abuse by the applicant. Potential sources of information are included at the end of the chapter.

PROJECT DESCRIPTION

Applicant Identification

The following basic information is needed:

- Legal name and address of the facility
- Name, position, and address of the person(s) serving as applicant for the facility
- Ownership of the facility (public, private nonprofit or proprietary)
- Type of service to the rendered by the applicant (general short-term care, skilled or intermediate long-term care, mental health care, ambulatory care, rehabilitation services, home health services, drug and alcoholism treatment, or any other service which requires state licensure).

The purpose of the project should be clearly understood. Specifications concerning the applicant's intention to build a new facility, replace an existing facility on the same or new site, expand an existing facility or service on the same or new site, or renovate existing plant and/or equipment must be made, and the anticipated effect on service capacity should be stated. The FmHA loan officer should also have information on the numbers of existing and proposed licensed beds by level of care as well as the status of the applicant's certification for the provision of services under Medicare, Medicaid, and the Maternal Child Health program. If a CON application has been filed, all of the above information should be available at either the local or state agency.

Project Costs and Financing

If a CON application has been required and submitted, the local and state review agencies should have cost estimates for construction/ renovation and financing. However, these agencies differ with regard to the degree of detail they require in the budget and finalization of financing agreements. For example, some states require gross square footage estimates for each of the proposed modifications. Others require detailed cost breakouts of land, buildings, fixed equipment, movable equipment, architects' fees, etc. Similarly, sources of proposed funding probably have been included in the CON application, categorized by many states according to amounts-in-hand (committed), assured but not in-hand and amounts requested. However, at a minimum, the FmHA loan officer should require an applicant to submit updated, specific information on cost estimates, pro forma financial statements and financing sources to ensure that any significant changes in data since submission of the CON application are

justified. Finally, letters of support from community groups or other facilities included in the CON request should be reviewed by FmHA in order to determine their relevance in view of any changing circumstances. Although data submitted through the CON application process can be very useful to the FmHA loan officer, it is imperative that he does not rely on it exclusively, but that he seeks and verifies specific, updated information where appropriate.

Project Need

The state's decision to accept or reject an applicant's CON proposal is based largely on that applicant's justification for the proposed services or facilities. If state review was not required, the loan officer must carefully scrutinize the applicant's rationale, ensuring that it contains factual information about the following:

- Physical location of the facility or equipment and a delineation of the proposed service area. Size of the site, conformance with local building and zoning codes, and travel distances from related service area locations should be indicated.
- Current and forecasted population of the service area (categorized by such factors as age, sex, race, income, and residence)
- Anticipated demand for the proposed health care services and the basis for these estimates
- Benefit to the community or service area which will result from the proposed change
- Existing services provided by other facilities or organizations within or near the service area which are similar to those proposed, and their respective current and forecasted utilization rates
- Anticipated effects that the proposed change will have on each of the facilities offering the same or similar services and vice-versa
- Evidence that the new facility/service will have the support of the health consumers within the service area.

Representatives of consumers include community organizations, local government, health agencies, third party payors and private health organizations

- Anticipated linkages between the proposed facility/service and other health care facilities or organizations in the service area. Included are formal arrangements for supportive services, transfer agreements, shared services, etc.

- Human resource requirements and availability of needed personnel (professional, para-medical, administrative)

- Estimated timetable for all phases of proposed project

- Relationship of the proposed facility to the areawide health plan and the State Medical Facilities Plan.

At this point, it must be re-emphasized that the amount of supplemental information which the FmHA loan officer must gather is contingent upon the reliability, validity and sufficiency of the information supplied by the applicant. In addition, the reputation of the applicant facility in the community and its affiliation with teaching or other respected institutions can enhance the justification of the proposed project. Teaching affiliations, in particular, not only increase a facility's esteem in the minds of community citizens, but also provide a continuing source of professional medical personnel.

Another major concern for the FmHA loan officer is the possibility of fraud and abuse of FmHA funds. The officer should profile board members, identifying questionable affiliations and any controlling interests in the facility. Recent Medicaid experience has shown that nonprofit facilities can serve effectively as conduits for transferring profits to affiliated proprietary organizations through board membership or ownership. This situation has been particularly applicable to nursing homes and health maintenance organizations during the past decade. A five percent ownership of a facility (in conjunction with affiliation with a

nonprofit organization) is adequate to warrant full disclosure and might be used as a rule of thumb by the FmHA loan officer.

Sources

Again, much of the descriptive information is available from the CON review (if performed) and may be obtained from either the State Health either the State Health Planning and Development Agency (SHPDA) or the local Health Systems Agency (HSA) which conducted the reviews. Hospital ownership, types of services provided, gross utilization figures, human resource requirements, expense figures and service capacities are available in the annual Hospital Guide and Statistics Guide, both published by the American Hospital Association in Chicago. Similar information for most nursing homes can be obtained from the American Association of Homes for the Aged (nonprofit) and the American Health Care Association (nonprofit and proprietary), both located in Washington, D.C. Although information about ambulatory care facilities is more difficult to find, the Center for Research on Ambulatory Care Facilities (supported by the Medical Group Management Association in Denver, Colorado) and the Accreditation Association of Ambulatory Health Care are good sources of utilization and cost information.

Still other sources of such information are the National Center for Health Statistics (a division of HHS), state Medicaid agencies, Medicare fiscal intermediaries, PSROs, local hospital associations and councils and local planning commissions. Each of these organizations can provide the FmHA loan officer with useful information for evaluating the feasibility of an applicant's proposed project. In addition, they can assist in identifying and addressing delinquency problems once a loan has been made.

V. ASSESSMENT OF DEMAND

INTRODUCTION

The first four chapters of this manual have provided a review of:

- The health care industry, emphasizing trends in costs, legislation and health care capital financing
- Components of a financial feasibility study
- Information required for feasibility determination of a proposed project.

Assuming that the FmHA loan officer has a thorough understanding of what a financial feasibility study entails and what the proposed project involves, he/she is now ready to begin the analysis. The first component to consider when determining the feasibility of a project is the expected demand for services. Unless current and future demand for the proposed services is accurately assessed, service volume forecasts and associated revenues and expenses can not be properly estimated.

This chapter is intended to serve only as a guideline for the evaluation of utilization information provided by the applicant to FmHA. The data may have been gathered by the applicant or an independent firm on the institution's behalf. The loan officer is not responsible for projecting service demand for an applicant. Instead, he should use the guidelines set forth in this chapter to evaluate demand forecasts submitted to FmHA.

Assessment of demand for a service generally requires a loan officer to be knowledgeable, astute and conscientious. A health care demand study evaluates past, present, and projected utilization for one or more services, and it generally incorporates such factors as:

- Service area identification
- Population trends
- Supply of services
- Utilization
- Medical staff utilization
- Competition.

From the above information, future service volume can be projected and used to predict associated revenues and expenditures. The entire process is subsequently reviewed by the lending agency to determine whether it is desirable to make a loan. Clearly, it is crucial that all factors significantly affecting demand be considered in order to produce reliable financial forecasts.

SERVICE AREA IDENTIFICATION

The first step in a demand study is usually identification of a facility's service area, the geographical region in which a large proportion of it patients reside. Usually the size and configuration of a service area are influenced by political boundaries, geographical barriers, population density, transportation patterns, citizens' attitudes, and other socioeconomic and demographic factors. A facility's service area generally consists of two components:

- Primary service area in which 50 to 100 percent of its patients reside
- Secondary service area in which most or all of the remaining patients reside.

Together, these two regions generally account for at least 90 percent of a facility's patients. Because many rural health care institutions are the sole providers in a region, their primary service areas include nearly 100 percent of their patients. Conversely, urban facilities are usually only one of several providers in a geographical area of comparable size and may draw a much smaller percentage of their patients from that area. This rather large range in percentage reflects not only competition in the market place but also the exclusiveness of services offered by a facility, the number of active physicians residing in the service area and other population characteristics.

Patient Origin Determination

Defining a service area for an existing facility is a detailed process. Historical patient origin data can be used to identify patient origin trends. (See glossary for definition of "patient origin.") From these trends, a geographical area that continually includes the majority of patients who seek and receive services from that facility can be delineated.

In rural areas where population density is low, and little competition exists in the health care market, patient origin data is often collected by large jurisdictions such as counties or townships. However, when more than one hospital exists within the primary service area, or when there is competition from facilities in surrounding areas, origin data will generally be available by zip code, census tract or small planning district and should be used by the applicant.

In the case of a new facility, the definition of a prospective service area is more complex because no historical data is available to serve as a basis for forecasting. The definition of a service area for a

new facility must be based on estimates of the same key factors that were used to determine the service area for an existing facility. Existing patterns of care can be expected to change according to the capacity of the proposed facility. However, population use-rates, physician supply and all other factors relating to the new facility must be estimated due to the absence of a historical data base. This process is often a difficult one, and it often requires an independent demand and financial feasibility study by a reputable organization.

Applications for new facilities should be reviewed carefully by the FmHA loan officer to ensure that all pertinent variables have been considered, impertinent factors have been excluded, estimated values are reasonable and all assumptions can be justified. The applicant should present clear evidence that:

- The proposed facility is needed by the surrounding population and medical community
- Physicians will seek privileges and admit patients to the facility
- Existing facilities will not be adversely affected by the construction of the new one.

The loan officer should seek the assistance of the appropriate HSA or SHPDA to confirm that the construction of the new facility is indicated. These agencies should provide FmHA with copies of the application and CON approval for the facility.

Inmigration and Outmigration

Generally, it may be assumed that most residents of a rural service area will seek care at the applicant facility, provided that the service area does not overlap that of a similar facility. However, some residents of a service area will routinely obtain care at facilities

outside their area. Conversely, residents of areas outside the applicant's service area may seek and obtain care at the applicant facility. This outmigration and inmigration for care may present a problem in the service area analysis. Often, the two factors cancel each other, indicating that the number of persons who leave the service area for care approximately equals the number who enter. However, when this is not the case, the discrepancies must be reasonably accounted for by the applicant.

Significant outmigration may indicate:

- Inappropriate or inadequate services within the service area or
- Inadequate access to existing services.

Significant inmigration may indicate:

- Inadequate services and/or access to those services existing outside the area or
- Other facilities are unable to compete successfully in the health care marketplace, reflecting strength of the applicant facility.

Patient origin information may be obtained from:

- Applicant facility's medical records
- HSAs and SHPDAs
- Other local and regional agencies such as councils of government and planning commissions.

DEMOGRAPHIC TRENDS

Population Growth

Once a service area has been established for an applicant facility, an analysis of demographic trends is important in order to determine whether they will affect the use of the facility. Population growth trends, in particular, must be evaluated so that ways in which an

area's population has changed in the past and ways in which it may change in the future may be identified. However, it is essential that only the portion of the population which will use the facility be considered. For example, the birth rate would be an appropriate indicator of future growth if an obstetrics or pediatric unit were proposed. In the case of a nursing home, the population over 65 years of age would be the most appropriate indicator.

Other Demographic Factors

Additional characteristics which reflect the composition of a service area should be included in a service area analysis:

- Median income
- Major industries and employers
- Type and extent of inmigration
- Type and extent of health care coverage.

Detailed trends and meaningful interpretations should be presented by the applicant for each of these factors which is deemed relevant.

UTILIZATION TRENDS

Patient Utilization of Services

Utilization information (including data for all competing facilities) should generally be collected and analyzed following service area identification and evaluation of demographic and economic characteristics.

First, the availability of services already in the service area which are comparable to those proposed by the applicant must be identified. When the application involves construction of a new short-term care

- Utilization data obtained from the applicant's demand study
- Trends in purchases of supplies and inventories by service/department
- Inflation.

Interest Expense. Only short-term interest expense (such as that for working capital loans) should be included here. (Long-term interest expense should be considered under capital expenditures.) Forecasted short-term interest expenses should be based on:

- Anticipated cash needs
- Prevailing and anticipated interest rates.

Rent and Lease Payment. These payments are determined by:

- The amount of equipment and building space rented or leased and
- The rental/lease payments, which are usually fixed for a period of time.

Forecasted rent/lease payments should be based on existing and anticipated agreements.

Utilities. Utility expenses are usually forecast separately because of frequent, large increases during the past few years. Increases in utility rates have been exceptionally difficult to forecast since the energy crisis began in the early 1970s. If utility companies cannot provide the applicant with information on future increases, nearby universities or economic forecasting groups familiar with the local utility industry may be of assistance. Otherwise, historical trends must be used. In addition to anticipated utility rates, an applicant's forecasted energy expenditures must also reflect its anticipated usage.

Malpractice Insurance. Malpractice premiums increased dramatically during the mid-1970s. However, they have since declined somewhat due to a decreasing number of lawsuits. A major reason for this trend is the enactment of legislation by several states which restricted the amount of money that could be awarded during litigation procedures. As is the case with utilities, insurance companies may not be able to provide information concerning future rates. Therefore, historical trends and payments made by the applicant institution as well as by comparable health facilities in the same geographical region may be all that is available to the applicant. In an effort to reduce insurance expense, some hospitals have:

- Reduced their coverage by insuring on a "claims made" basis rather than on the more costly "occurrence" basis.
- Become partially or fully self-insured.

Either of these changes must be reflected in the applicant's forecasts for malpractice insurance. In cases where institutions are self-insured, its assets should have been evaluated by a reputable actuarial firm in order to determine sufficiency of collateral in the event of a successful malpractice suit.

Forecasted malpractice expenditures should be based on:

- Forecasted increases in premiums (or assets if self-insured)
- Forecasted increases in the number of insurable employees.

Capital Costs

Capital costs include all expenses incurred to secure funds for capital projects. These include both interest and principal, and other debt-related expenses such as bond discounts, attorneys' fees, bond counsel, etc. When these funds are used to invest in capital assets, they

occupancy rates for an entire facility are useful, it is generally more satisfactory to calculate these rates by inpatient service category (i.e., medicine-surgery, obstetrics, pediatrics, psychiatry) where short-term hospitals are concerned. Only then will it be possible to determine exactly which services are under-used, which are adequately used, and which are excessively used. From such information, the FmHA loan officer can draw inferences about whether a new facility/service is needed.

In the case of a nursing home application, an occupancy rate of 85 percent or greater is usually an indication of financial stability. However, new facilities may take as long as eighteen months to reach an 85 percent occupancy due to start-up delays, community and physician acceptance and third-party payor negotiations. As is the case for hospitals, nursing home occupancy rates vary according to geographical location, size of the facility and types of services offered.

Although occupancy rates cannot be calculated for an ambulatory care facility, there are two useful indicators of utilization:

- Number of emergency room visits per inpatient admission
- Number of outpatient visits per thousand population.

Ambulatory care services may be provided by a freestanding clinic or by a hospital (either within the hospital setting or at another location). Ambulatory services generally include emergency room care and outpatient clinics (general or specialty). The utilization of hospital outpatient services reflects the outreach of an institution to its community as well as the availability of physician services in the area. The emergency and outpatient departments are key community services offered by most hospitals and are often responsible for many inpatient admissions. Their utilization is mainly dependent upon emergency referral patterns within the service

area, the quality and availability of physicians, hours of operation and convenience of location. Due to increased emphasis on cost containment, ambulatory service utilization will likely increase significantly in the future at the expense of inpatient service utilization.

Ancillary services provide diagnostic and support capabilities to hospitals, nursing homes and freestanding ambulatory clinics. These medical support services include laboratory, radiology, electrocardiology, nuclear medicine, surgery, and many others. The volume of ancillary services provided is usually dependent on the number of tests and procedures ordered by physicians for their patients. In recent years, the number of procedures performed per patient day or per admission has dramatically increased. In fact, increased ancillary service usage has recently been a major contributor to skyrocketing health care expenses. Specific factors which influence the use of these services include:

- Medical staff policy
- Individual physician practice patterns
- Fear of law suit and tendency to practice "defensive medicine"
- Affiliations with teaching programs
- Number and sophistication of ancillary facilities
- Lengths of hospital stay
- Case-mix of facility.

Volume forecasts for ancillary services should be carefully examined by the loan officer, and any significant increase in usage (either recent or proposed) should be thoroughly justified. Such increases may indicate overutilization, a desire to increase revenue or both. With the introduction of the Prospective Payment System, it will behoove hospitals

to limit ancillary services, as Medicare reimbursement will no longer be directly related to the amount of service provided.

The average length of stay (ALOS), which has traditionally been another key indicator of inpatient service utilization, represents the average number of days of care delivered per patient admission. Frequently, a facility's ALOS reflects services provided by all departments, regardless of variations among them. Such an indicator is generally useful only when overall ALOS values for similar institutions are compared. In such cases, they can provide a general indication of whether utilization is less than or greater than average for a specific facility. However, ALOS values for specific services are more helpful in identifying unusual lengths of stay within an institution. Differences in ALOS may reflect:

- The type of services offered
- Case-mix of a facility
- Hospital management and medical staff policies
- Population characteristics
- Effectiveness of utilization review
- Affiliations with a teaching program.

In 1982, the ALOS in acute care hospitals ranged from 6.5 to 8.5 days, with a national average of 7.2. Nationwide, persons over 65 years of age incurred an ALOS of 10.1 days in short-term hospitals, and in extended health care facilities, the duration was much longer. 1/ For the general population, the ALOS in short-term hospitals varied among U.S. regions in 1981 as follows: Northeast, 8.5; North Central, 7.4;

1/ Rate Controls, An Analytical Newsletter on Health Care Trends and Developments, Vol. 7, No. 6, June 23, 1983. p. 8.

South, 6.8; and West, 6.0. For persons over 65 years of age, the ALOS in short-term hospitals in 1981 was: Northeast, 13.1; North Central, 10.6; South, 9.9; and West, 8.3. 2/

While ALOS has been a very important consideration during the years of cost reimbursement, its implications for demand analysis will change with the current conversion to prospective reimbursement by Medicare. In other words, a high ALOS has traditionally resulted in greater reimbursement for a health care facility. However, the FmHA loan officer should realize that a high ALOS is a disadvantage where prospective payment is concerned, because facilities are paid according to the type of patient treated, regardless of the time spent in the hospital. In the future, it will be important for hospitals to establish ALOS standards for each DRG in order to maximize prospective reimbursement.

If an applicant's forecasts indicate significant changes in ALOS, the rationale behind these changes should be made clear to the FmHA loan officer. For example, if the historical ALOS is forecasted to decrease from 7.0 to 5.0 days with no foreseeable change in type of patient, the reason for that decrease should be determined. The loan officer should realize, however, that ALOS values may decline significantly with the onset of prospective reimbursement, depending upon the historical ALOS in the facility. In addition, any substantial forecasted increase in the number of patient admissions should be analyzed, as a greater number of admissions will result in greater Medicare reimbursement.

To effectively analyze the demand for a service, three to five years' of historical utilization data should be gathered for the applicant

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2/ National Center for Health Statistics, Utilization of Short-Stay Hospitals, Annual Summary for the United States, 1981.

facility, as well as for competitors in the surrounding area. This information (which usually reflects the number of admissions/discharges, visits or procedures performed over time) is helpful in:

- Identifying trends in the usage of the applicant facility's services
- Comparing an applicant to competitive facilities located in the same geographical area.

Utilization data should also be forecast by an applicant for three to five years. However, the number of years of forecasted data should generally not exceed the number of years of historical data supplied. Again, these estimates should reflect historical performance, recent demographic trends in the service area, the impact of competitive facilities, and any other factors which might affect operating statistics.

Physician Availability and Utilization

In addition to analyzing demographic, economic, and utilization trends in a properly defined service area, an assessment of physician availability and utilization patterns must be made. The composition of a facility's medical staff has a tremendous influence on overall institutional performance. Specifically, the staff must be adequate in size and sufficiently diversified according to age, specialty, and mode of practice (group vs. solo). Within a service area, the number of physicians by specialty per thousand of the appropriate population is an indicator of the availability of general health care practitioners in that area. If an insufficient number of physicians practice in the area, the population may be underserved, the hospital will most likely be underutilized, and a significant amount of outmigration may occur as the service area population seeks care elsewhere. Conversely, when there is an overabundance of

physicians in one or more specialties, competition for patients and availability of hospital beds may become an important factor. A surplus of physicians may also create a situation where physicians compete with the hospital in providing certain ambulatory services in the community.

When assessing physician utilization of a rural applicant facility, the FmHA loan officer should pay particular attention to a decreasing number of physicians due to an aging medical staff. Also a disproportionately high admission rate by a few aging physicians should be noted as recruitment of doctors to some rural areas is a difficult, time-consuming process. Applicant facilities proposing to recruit additional physicians should clearly indicate the method of recruitment and provide evidence of physician commitment to the facility. An accurate assessment of current and forecasted physician patronage is absolutely essential in order to properly estimate future revenues.

A medical staff profile should be provided to FmHA by the applicant so that it can be determined whether sufficient physician support will exist throughout the forecast period. The profile should include:

- The names of all physicians currently on staff
- The admitting status of each member
- Specialty
- Age
- Mode of practice (group vs. solo)
- Office location.

In addition, the average age of active admitting physicians, the number of specialists in relation to the number of generalists, staff practice patterns in the service area, and the percentage of admissions accounted for by the top ten admitters should be thoroughly analyzed. All

significant changes in medical staff composition or admitting patterns should be identified and analyzed in order to determine whether any further changes might occur in the future. Insufficient physician support, regardless of the reason, could easily jeopardize existing as well as proposed services. Again, it is the loan officer's responsibility to verify data and analyses which have been submitted by the applicant, not to perform the actual analyses.

Competitive Facility Utilization

A health care facility serves or proposes to serve a population residing within geographically defined areas. In many cases, the boundaries of that service area are based on market competition for patients and physicians. A key indicator of a facility's success as a provider of health services is its market share. In this manual, a facility's market share represents the portion of a certain patient population which that facility serves (the rest of which is served by similar, competing facilities). Often, a facility's market share is in proportion to its size; a small facility usually captures a smaller portion of the market share than a larger facility. Historical and forecasted relationships between the applicant facility and other competitive facilities should be carefully examined to identify any significant changes in supply share, market share, and delivery share:

- Supply Share--The percentage of all resources available in a service area which are supplied by a given facility.
- Market Share--The percentage of all services actually provided in a service area which are provided by a given facility.
- Delivery Share--The relationship of market share to supply share, indicating what portion of its resources it actually utilizes in serving its patients.

Evaluation of competitors' expansion plans and projected utilization is an extremely important part of the applicant's market analysis. Accurate historical data provide insight into the past market relationships among all competitive health facilities. Projected utilization of the applicant facility depends upon competitors' expansion plans, new programs, and projected utilization. The applicant should submit information reflecting future plans for other facilities, explaining how they may affect the applicant in terms of market share and utilization rates for various services. Often the local HSA and the SHPDA can provide detailed information regarding all facilities in and around an applicant's service area. As a lending agency, the FmHA should be completely satisfied that the applicant facility can continue to successfully compete in the marketplace.

POTENTIAL PROBLEM AREAS

Following are the major potential problem areas concerning a facility's demand assessment of which the FmHA loan officer must be aware:

- Improper identification of service area
- Inaccurate or incomplete data
- Invalid assumptions upon which the conclusions are based
- Failure to account for utilization and expansion of competitive facilities
- Inadequate physician support.

The above list is certainly not complete; it merely indicates the major problems which a loan officer can encounter in reviewing an applicant's demand assessment. It is the officer's responsibility to identify any significant problems which should cause him to question the need for the proposed project.

In summary, verification of information, thorough evaluation of all pertinent data, and an objective viewpoint are required in order to properly and fairly analyze a loan application. Included in Chapter VI are the kinds of expenses incurred by health care facilities, types of financing available, and procedures for forecasting debt service requirements.

VI. OPERATING EXPENSES AND DEBT SERVICE FORECAST

INTRODUCTION

In order for the FmHA loan officer to determine whether an applicant's proposed project is financially feasible, he must have a forecast of capital costs and operating expenses. However, he must thoroughly evaluate all underlying assumptions before assessing the actual forecasts. One must pay particular attention to the wording in a feasibility study report, noting whether it refers to forecasts or projections. This is especially important if the forecasts or projections have been prepared by a certified public accounting firm, as the American Institute of Certified Public Accountants employs the following definitions:

- Financial Forecast--"A financial forecast for an enterprise is an estimate of the most probable financial position, results of operations and changes in financial position for one or more future periods.

  In this context:

  --Enterprise means an entity for which financial statements could be prepared in accordance with generally accepted accounting principles.

  --Most probable means that the assumptions have been evaluated by management and that the forecast is based on management's judgement of the most likely set of conditions and its most likely course of action.

- Financial Projection--A financial projection for an enterprise is an estimate of financial results based on assumptions which are not necessarily the most likely. Financial projections are often developed as a response to such questions as: What would happen if?

Even though the forecasts may indicate financial feasibility, the assumptions upon which they are based may be entirely unwarranted. In such cases, forecasts can be very misleading. It must be recognized that any forecast is only an estimate based on the most probable occurrence. Actual results will vary from the forecast because of the large number of variables which are beyond the control of the health facility and which cannot be predicted with absolute certainty. Therefore, it is essential that the forecast be based on reliable and verifiable assumptions. For example, forecasted inflation rates may be obtained from studies done by the U.S. Department of Commerce or the President's Council of Economic Advisors.

This chapter includes a discussion of:

- The types of expenses (operating and capital) incurred by health care facilities
- Factors which should have been considered by the applicant in forecasting them
- Project cost determination
- Types of financing available
- Procedures for forecasting debt service requirements.

The discussion is general in nature and is applicable to all types of rural health care facilities. However, the extent to which individual items in this chapter pertain to a particular project depends on the nature and size of that project.

TYPES OF HEALTH CARE FACILITY EXPENDITURES

Operating Expenses

Operating expenses include all costs related to day to day operations of the facility. Included are the following major categories:

- Salaries and wages
- Fringe benefits
- Professional fees
- Supplies and inventories
- Short-term interest expense
- Rent and lease payments
- Utilities
- Malpractice insurance.

Because of the nature of health care facilities, particularly hospitals, there are a number of operating expenses over which the administrator can exercise only limited control. For example, physicians largely determine their professional fees and use of medical supplies, unions may influence wages and fringe benefits, and external agencies dictate interest rates, rent or lease payments, malpractice insurance rates, etc. Figure VI-1 indicates the major expenditures of a health care facility and their normal proportions of the operating budget.

Salaries and Wages. Salaries and wages represent the major expense of a health care facility (usually about 50% of total expenses) and are a major component of any expense forecast. Salary expense can be determined by multiplying the number of employees in each wage category by the appropriate remuneration, and summing the remunerations to include all of the facility's employees. The number of employees should be directly related to the number of patients to be treated by each service and is, therefore, determined by the results of the demand phase of the feasibility study. (See Chapter V). Nursing units should be staffed according to patient acuity as well as utilization levels.

If an expansion or change in services is planned, staffing projections should be adjusted accordingly and should reflect timing of additional staff members according to project phase. The facility should be able to demonstrate that a detailed staffing plan was developed for the forecast. Guidelines developed by the American Hospital Association and other hospital and professional associations are available for the evaluation of projected staffing needs. A general indicator of staffing is the number of full-time equivalents (FTE) per occupied bed for each service. Although it may be useful to compare values for the applicant facility with local or regional averages, departures may be justified by individual circumstances.

Forecasted salary and wage levels should reflect known and anticipated pay raises, such as those resulting from minimum wage increases and union agreements. If additional staff are projected, salary and wage levels should be competitive with those in the area.

Fringe Benefits. Fringe benefits (such as pensions, insurance, and payroll taxes) are closely, but not entirely, related to forecasted salaries and wages. They may also be influenced by:

- Union negotiations
- Enactment of new legislation which affects pension rights, social security taxation, unemployment insurance payments, etc.

Professional Fees. Hospitals may enter into physician contracts under which the physician assumes responsibility for all or part of a department's operations in return for compensation. These hospital-based physicians are usually, although not always, employed in emergency rooms, radiology, pathology and anesthesiology. The amount and method of payment,

as well as duties of the physician, depend upon the terms of the contract. In some cases, a physician is responsible for paying overhead and expenses associated with support staff, so an appropriate amount is included in his remuneration for these purposes. In other instances, these expenses are paid by the hospital. The prospective payment legislation which was recently enacted includes numerous specifications concerning reimbursement for physicians. Specifically, it:

- requires more precise differentiation between Part A and Part B services performed by physicians
- establishes stricter reimbursement limits for all Part A services (physician services provided for the hospital rather than individual patients). Although the physician reimbursement factor has yet to be incorporated into the DRG payment system, Medicare payment for these services will likely decrease in the future. Consequently, hospitals must decide whether to subsidize Medicare's physician payments, negotiate payments or withold subsidization.

The applicant should have computed forecasted physician fees in accordance with expected contract terms and incorporated any anticipated changes into the contracts.

Physicians who work in ambulatory clinics may be reimbursed in one of several ways:

- Salary as an employee of the facility
- Salary as an employee of a contracted organization
- Fee-for-service
- Percentage of total departmental revenues.

Nursing homes do not generally employ physicians directly but compensate them by fee-for-service or through the use of retainers.

Forecasted physicians' fees should reflect all changes in medical staff resources which were indicated by the applicant's demand study. In addition, they should reflect the Consumer Price Index (CPI) for

physicians' fees, which is published by the U.S. Department of Labor. Table VI-1 illustrates a significant rise in physicians' fees during the past two decades. Projections for yearly increases may be made using this index.

Although third-party payors have not traditionally controlled physician reimbursement, the new prospective payment legislation includes a provision which orders a study involving the application of DRGs to physician reimbursement. Currently, about 80 percent of the cost decisions in a hospital are made by doctors. There is a widely held belief that because there is no incentive for physicians to minimize costs, putting them in the same "pot" with health care institutions could help to create that incentive. In the event that physicians are reimbursed prospectively, it will still be the responsibility of each facility to negotiate salaries with its medical staff. This may adversely affect rural facilities which may not be as capable of retaining their physicians at lower salaries as the generally more appealing urban facilities.

Supplies and Inventories. This category includes various items used primarily by patients and is, therefore, closely related to forecasted utilization. Usually, a hospital's investment in supplies and inventory represents between 15-20 percent of total expenses. A typical distribution of expenditures among a hospital's major inventories is shown in Figure VI-2. It is interesting to note that the purchase of pharmaceutical, dietary, medical-surgical, and lab/X-ray supplies (which account for 63% of the total) is frequently outside the control of the central purchasing agent. Forecasted expenditures for supplies and inventories should be based on:

- Utilization data obtained from the applicant's demand study
- Trends in purchases of supplies and inventories by service/department
- Inflation.

Interest Expense. Only short-term interest expense (such as that for working capital loans) should be included here. (Long-term interest expense should be considered under capital expenditures.) Forecasted short-term interest expenses should be based on:

- Anticipated cash needs
- Prevailing and anticipated interest rates.

Rent and Lease Payment. These payments are determined by:

- The amount of equipment and building space rented or leased and
- The rental/lease payments, which are usually fixed for a period of time.

Forecasted rent/lease payments should be based on existing and anticipated agreements.

Utilities. Utility expenses are usually forecast separately because of frequent, large increases during the past few years. Increases in utility rates have been exceptionally difficult to forecast since the energy crisis began in the early 1970s. If utility companies cannot provide the applicant with information on future increases, nearby universities or economic forecasting groups familiar with the local utility industry may be of assistance. Otherwise, historical trends must be used. In addition to anticipated utility rates, an applicant's forecasted energy expenditures must also reflect its anticipated usage.

Malpractice Insurance. Malpractice premiums increased dramatically during the mid-1970s. However, they have since declined somewhat due to a decreasing number of lawsuits. A major reason for this trend is the enactment of legislation by several states which restricted the amount of money that could be awarded during litigation procedures. As is the case with utilities, insurance companies may not be able to provide information concerning future rates. Therefore, historical trends and payments made by the applicant institution as well as by comparable health facilities in the same geographical region may be all that is available to the applicant. In an effort to reduce insurance expense, some hospitals have:

- Reduced their coverage by insuring on a "claims made" basis rather than on the more costly "occurrence" basis.
- Become partially or fully self-insured.

Either of these changes must be reflected in the applicant's forecasts for malpractice insurance. In cases where institutions are self-insured, its assets should have been evaluated by a reputable actuarial firm in order to determine sufficiency of collateral in the event of a successful malpractice suit.

Forecasted malpractice expenditures should be based on:

- Forecasted increases in premiums (or assets if self-insured)
- Forecasted increases in the number of insurable employees.

Capital Costs

Capital costs include all expenses incurred to secure funds for capital projects. These include both interest and principal, and other debt-related expenses such as bond discounts, attorneys' fees, bond counsel, etc. When these funds are used to invest in capital assets, they

are charged to operating expenses through depreciation, interest, and amortization over a number of years. It is important for the loan officer to understand that costs of capital do not fluctuate with changes in patient volume. This factor must be reflected in a facility's application.

Depreciation. Depreciation represents the allocation of the cost of an asset over its estimated useful life. The amount of depreciation charged to expense in any year depends upon:

- The cost of the asset
- The useful life of the asset
- Its ultimate salvage value
- The depreciation method used.

The cost of an asset should include all amounts required to purchase or construct the asset. In the case of constructed assets, cost includes not only amounts spent on actual construction, but also architectural and engineering fees related to construction. Also, any interest paid during construction on debt used to finance construction should be capitalized as part of the cost. However, interest paid must be offset by any interest earned on idle funds.

An accepted guideline for estimating the useful life of an asset is the American Hospital Association's depreciation manual. The lives in this publication are accepted by Medicare and have become fairly standard throughout the health care industry. Justification should be provided for any departures from these lives.

Although there are several methods for computing depreciation (straight-line and accelerated approaches such as sum-of-the-years' digits and declining balance), Medicare will generally accept only straight-line

depreciation which allocates an equal amount of the net cost (actual cost less salvage value) to expense for each year of the project's useful life. The use of other depreciation methods within the health care industry for financial statement purposes is becoming less common. However, if they are used, they must be justified by the applicant. Justification includes assurance that the Medicare fiscal intermediary and the local Blue Cross plan will accept any variation from the straight-line method for reimbursement purposes.

FINANCING COSTS AND DEBT SERVICE REQUIREMENTS

In preparing a financial forecast, a facility should have considered the costs of financing and debt service requirements. The forecast will be based on a particular type of financing and should reflect the terms and conditions of the actual agreement(s). The terms of a loan determine the interest expense. In addition, they will also affect depreciation expense because any interest paid during construction/improvement will be capitalized into the cost of the project, increasing the total project cost. Furthermore, the annual debt service can significantly influence the facility's cash outflow. Clearly, it is essential that all factors related to financing be taken into account when preparing a forecast.

The interest rate used should be the market rate expected at the time financing is to be obtained. The loan payment period should be typical for the type of financing proposed and for the geographic and financial community in which the facility is located. For example, if a loan term is usually twenty years for the type of loan being considered, the facility should have used a twenty year loan period as the basis for its forecast.

Any restrictions in the loan agreement should have been considered. For example, if the loan agreement contains restrictions on the issuance of further debt, the facility should not be planning to incur indebtedness which would violate this restriction. Also, existing debt covenants must have been incorporated into the facility's total debt service. Other factors such as prepayment penalties should also have been taken into consideration.

The facility should have available a debt amortization schedule showing all principal and interest payments over the life of the issue. The amortization schedule should have been used in preparing the forecasted financial statements and should be included with the FmHA application.

All costs of obtaining financing should have been considered, including legal fees, the cost of a feasibility study, and underwriting of other loan fees. Such costs should be capitalized as part of the project and amortized over the life of the debt.

If any special funds are created by or required by the loan agreement, such funds should be reflected in the forecasted financial statements. For example, the agreement may require a depreciation reserve (or sinking) fund into which an amount equal to depreciation expense less principal payments is deposited each year. Another type of fund required by many bond issues is a bond reserve fund equal to one year's principal and interest payments. This amount is usually funded from the proceeds of the bond issue. The reserve is created to avoid a default in case an unexpected problem prevents the facility from having sufficient cash to meet a required payment.

A facility should also have considered other types of available financing, including:

- Internally generated excess working capital.

- Special purpose grants or endowments which are available for health care capital projects. Many local foundations, as well as some national foundations, have a particular interest in health care advancement. However, most foundations exclude proprietary and public facilities from eligibility for financial assistance. The FmHA loan officer needs to be aware of these funds and any restrictions for their uses in order to properly appraise their availability for the proposed project. Any restrictions should be contained in the notes to the Balance Sheet submitted by the applicant.

- Conventional mortgage or taxable bonds through private placement. Securities in the form of mortgage bonds, notes, or debt instruments may be placed with one or more institutional lenders, including commercial banks, life insurance companies and pension funds.

- Tax exempt bond issues by state or local governments, or agencies which have been granted authority to issue them. Interest paid on this class of bonds is not taxable to the bondholders, so interest rates are lower than those for taxable debt.

- Federal Government Insured Mortgage Program (Section 242 for hospitals, Section 232 for long term care facilities, and Title XI for group practice facilities). This program, which is administered by the Federal Housing Authority (FHA), provides health care facilities with government-sponsored mortgage insurance, enabling these facilities to obtain loans at a much lower cost due to increased security.

- HMO grants, loans, and loan guarantees. Grants for feasibility studies and initial planning and development are available to public and nonprofit private organizations. Loans are also available for start-up costs. (Although TEFRA has eliminated most of these grants and many of the loans and loan guarantees, a few will remain available through 1984. However, only federally-qualified HMOs which are unable to secure loans from private lenders at the prevailing rate will be entitled to such assistance.)

- HHS grants for ambulatory care centers. These include funds for specific categories such as Comprehensive Community Health Centers, Appalachian Regional Health projects, Community Mental Health Centers, Rural Health Initiative demonstration projects, and Migrant Health Centers.

- Equity financing (for proprietary institutions).

IMPLICATIONS FOR THE FMHA LOAN OFFICER

The FmHA loan officer must realize that, although the above sources of financing are available,

- Most health care facilities have little, if any, excess working capital
- Grants and endowments are becoming more scarce
- Interest rates on bonds are relatively high
- Loan restrictions (imposed by both government agencies and private lenders) are increasing
- Many government agencies are discontinuing provisions for loans/loan guarantees to health care facilities.

As a consequence of the decreased availability of financial assistance, the FMHA loan officer may receive an increasing number of loan applications from rural health care facilities in the future. Undertaking a major capital project in the current economy is a challenge for most health care facilities, particularly in view of declining reimbursement. Therefore, the loan officer must assume an even greater responsibility in the future for thoroughly assessing each applicant facility's financial status. In addition, he should ascertain whether, in the case of a hospital, costs are being monitored by patient according to DRG classification. An effective way to assess institutional performance under the prospective payment system is to analyze and monitor costs by service unit, or DRG.

POTENTIAL PROBLEM AREAS

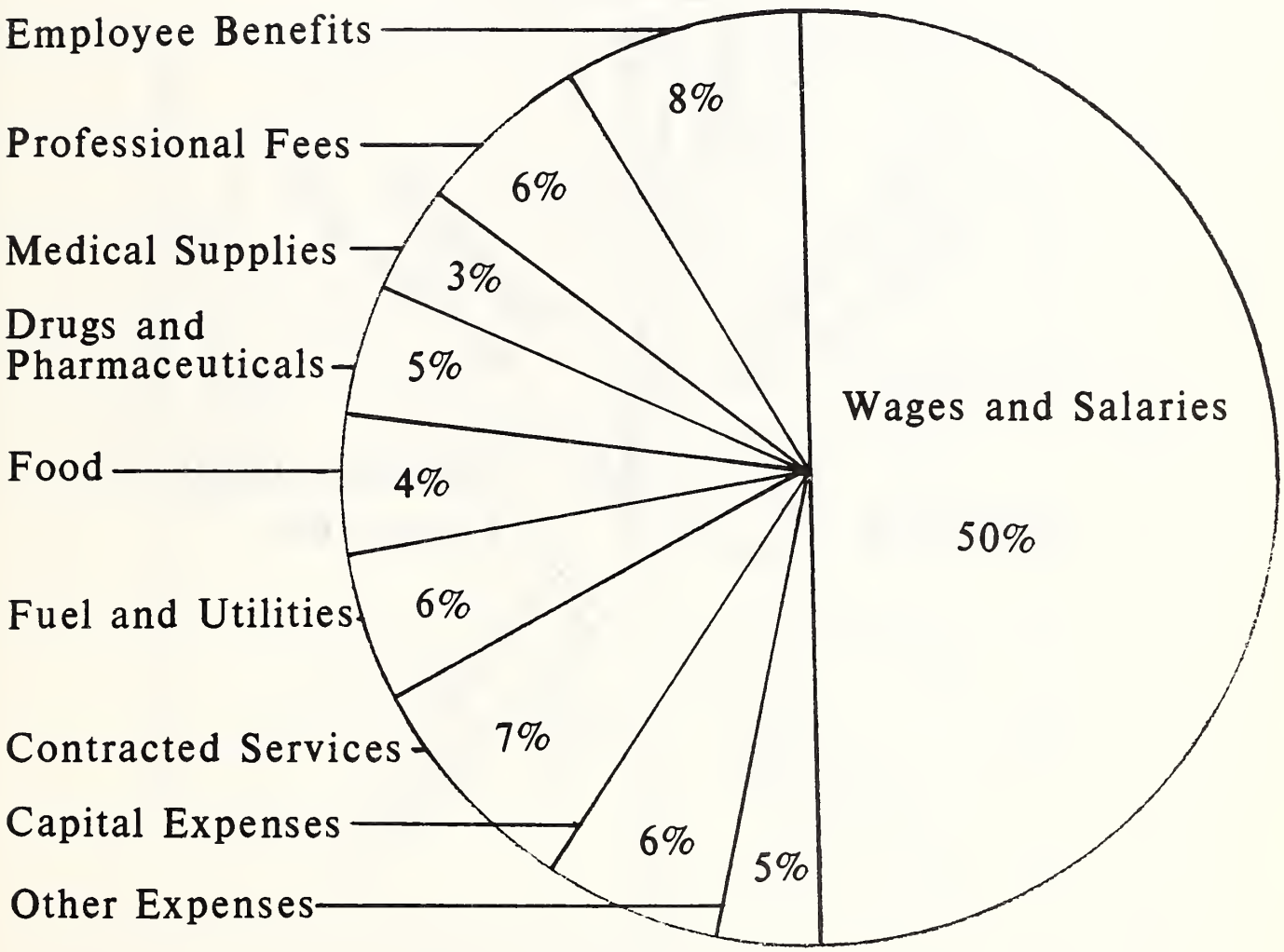
In summary, the expense forecast should reflect the best estimate of future expenses based on reasonable assumptions. Some indicators of potential problems include:

- Salary and wage expense considerably above or below sixty percent of the operating budget, indicating that certain wages may be unrealistically high or low
- Inaccurate forecasts of inflation
- Unrealistic estimates of useful life and salvage value (which may not be accepted by third-party payors)
- Incomplete or inaccurate project cost estimates
- Failure to seek competitive bids for the project
- Failure to consider all available sources of funds for capital financing.

A more detailed listing of the specific factors which the FmHA loan officer should consider when reviewing forecasted project expenses is contained in the Financial Feasibility Checklists in Chapter XI. Meanwhile, in Chapter VII, the major sources of health care revenue and other factors to be considered in the evaluation of revenue forecasts are discussed.

Figure VI-1

Component Contribution to Hospital Expense Index



Source: Hospitals, American Hospital Association, April 1, 1983

Figure VI-2

How the Money is Distributed Among Supplies and Inventories

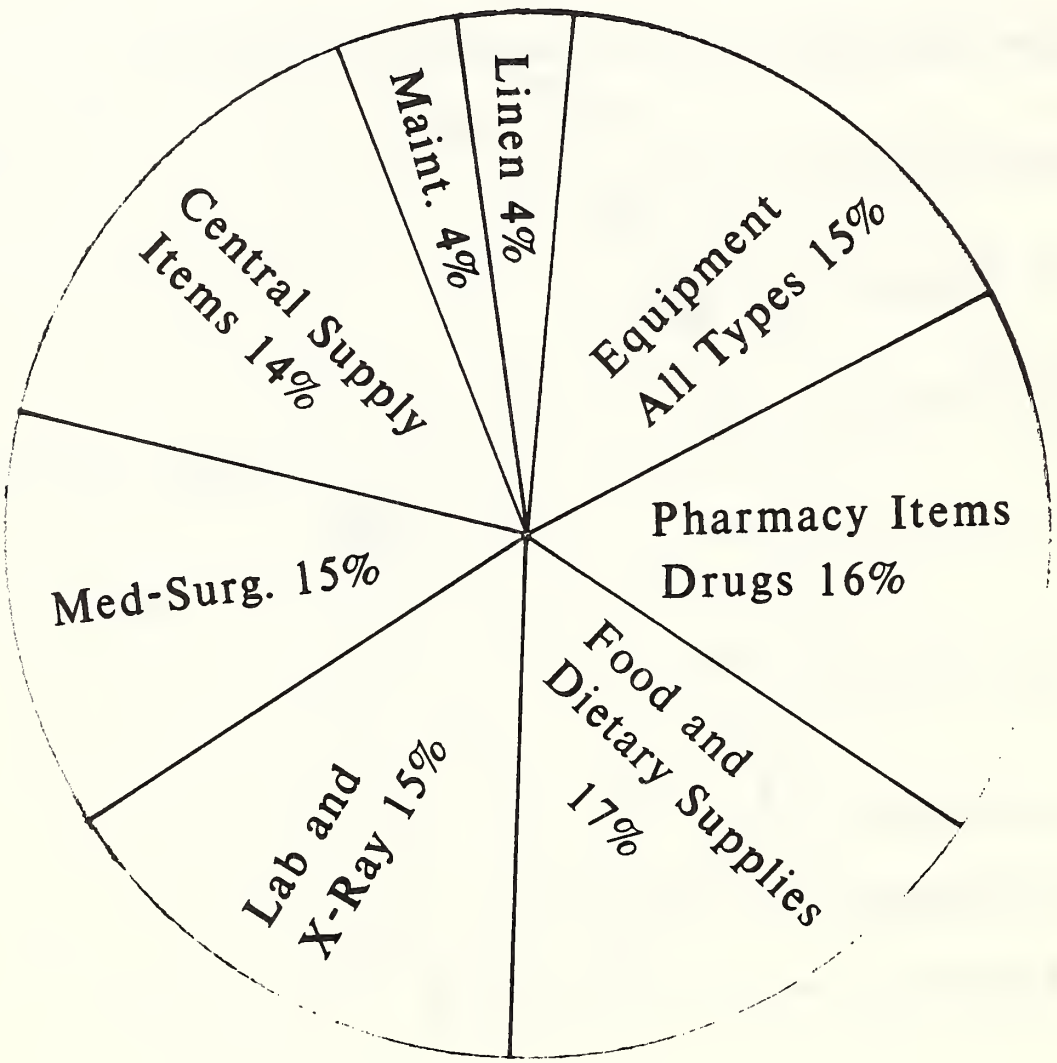


TABLE VI-1

CONSUMER PRICE INDEX FOR URBAN WAGE EARNERS AND CLERICAL WORKERS

U.S. CITY AVERAGE
PHYSICIAN'S FEES
(1967 = 100)

YEAR	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	AVE
1961			78.3			78.9			79.4			80.2	79.0
1962			80.8			81.3			81.7			82.2	81.3
1963			82.9			83.1			83.4			83.8	83.1
1964						85.0						86.3	85.2
1965						88.0			88.7			89.6	88.3
1966			91.2			93.0			95.1			96.6	93.4
1967			98.5			99.8			101.3			102.5	100.0
1968			104.1			105.3			106.5			108.4	105.6
1969	108.8	109.8	110.9	111.4	112.1	113.0	113.4	114.0	114.8	115.0	115.6	116.3	112.9
1970	116.8	117.4	119.0	119.4	120.3	121.6	121.9	122.6	123.3	123.7	124.6	125.7	121.4
1971	125.9	126.6	128.0	128.5	129.2	129.9	130.3	131.2	131.5	131.7	132.0	132.2	129.8
1972	132.3	132.6	132.9	133.2	133.3	133.9	134.0	134.2	134.4	134.6	134.8	135.4	133.8
1973	135.7	136.1	137.7	136.9	137.5	138.0	138.2	138.6	139.6	139.9	140.3	140.8	138.2
1974	141.3	142.6	145.0	145.8	147.7	150.3	152.3	154.3	155.9	157.3	158.2	159.5	150.9
1975	160.9	162.9	165.0	166.2	167.2	168.8	169.7	171.0	172.9	174.1	176.1	178.3	169.4
1976	179.5	181.9	184.3	185.6	186.8	188.3	189.4	190.6	192.2	193.1	194.9	195.6	188.5
1977	197.1	198.8	201.3	203.0	204.3	205.7	207.0	208.6	209.9	210.7	211.9	213.5	206.0
1978	215.7	217.3	218.4	219.6	221.3	222.3	223.7	225.3	227.1	228.4	230.1	230.9	223.3
1979	223.7	236.2	238.2	240.0	241.4	243.6	246.8	248.7	251.5	254.4	255.5	256.5	245.5
1980	260.3	264.1	266.2	269.7	272.3	273.9	275.4	277.6	280.5	281.8	283.8	285.7	274.3
1981	290.0	293.9	296.3	297.9	300.3	302.4	304.7	306.7	308.6	310.9	314.1	316.0	303.5
1982	318.6	321.7	323.2	325.2	327.0	329.4	331.6	333.5	335.4	337.4	338.6	339.9	330.1
1983	344.6	348.2	349.8										

Source: Bureau of Labor Statistics, U.S. Department of Labor, July 1983.

VII. REVENUE FORECAST

INTRODUCTION

For a project to be feasible, sufficient revenue must be generated to cover the operating expenses of the project and related debt service. Thus, a financial feasibility study must include an analysis of forecasted revenues associated with the project, as well as the expenses.

This chapter provides a discussion of the major sources of health care revenue and factors to be considered in the evaluation of revenue forecasts. Sources of revenue are divided into the following categories:

- Patient service revenue
- Deductions from revenue
- Other operating revenue
- Non-operating revenue.

Although the principles outlined in this chapter are related to hospitals in order to simplify the discussion, most are also applicable to nursing homes and clinics. However, there may be instances where departures from these principals are indicated due to unique circumstances. Therefore, the information provided here should be used only as a guideline and should be modified accordingly.

In addition, when determining expenses and revenues, the applicant should use accrual accounting; expenses and revenues should be recorded when purchase agreements are made and services are provided

rather than when cash expenditures are made and payments are received. The same principle should apply to forecasts for expenses and revenues.

PATIENT SERVICE REVENUES

Sources of Revenue

The major portion of most health care facilities' revenue is received in return for delivery of patient care, either from individual patients or third-party payors. Patient service revenues have traditionally fallen into two broad classifications: routine service revenue and ancillary service revenue. The former is drawn from the use of a facility; it covers the costs of a regular room, dietary and nursing services, minor medical-surgical supplies, and other services for which separate charges are not customarily made. The latter arises from the use of medically-related support services (such as laboratory, operating room, electrocardiology services, etc.). Patients are normally charged on an item-by-item basis as ancillary services are used. The number and type of ancillary services available at a facility are dependent on the type of care offered and the size of the facility. The extent to which they are used is determined by medical staff policies and individual practice patterns.

As previously mentioned, a unique characteristic of the health care industry is that a substantial portion of the costs of patient care is paid by third-party payors, not individual patients. The major third-party payors (Medicare, Medicaid, and Blue Cross) contract with health care facilities to provide payment in return for health care services delivered to their beneficiaries, recipients and subscribers, respectively. Although commercial insurance companies also pay on behalf

of individual patients, they usually contract with the patients rather than the providers. Thus, the patient is still primarily liable to the health care facility for payment.

Bases of Payment

Inpatient Services. Self-paying patients (those who have no health care insurance) and most commercial insurers pay the full amount of hospital charges. However, the major third-parties generally pay on a basis other than charges. The most common bases are described below. Details for rate determination are provided in a subsequent section.

(a) Retrospective reimbursement based on allowable actual costs. In this case a program pays for all of the actual allowable costs of a patient's care, rather than charges. Most programs will pay costs only if they are less than charges. Should costs exceed charges, the programs will pay only charges, and the facility will not receive any reimbursement for the excess. Up until the late 1970s, most Blue Cross plans reimbursed on this basis.

(b) Retrospective limited cost-based reimbursement. This method is similar to (a) except that routine service costs will be reimbursed only to the extent that they do not exceed some maximum, usually a set per diem rate. Medicare and Medicaid have traditionally used this approach.

(c) Prospective reimbursement using fixed rates based on historical cost data for each provider. Under prospective reimbursement systems, the amount of payment for services is determined in advance, usually by applying an inflation adjustment to the prior year's actual or budgeted costs. The amount of reimbursement does not vary, even if actual costs are greater than what was expected. Thus, if a facility's costs rise at a rate greater than inflation, the difference will not be reimbursed. This is the basis for Medicare reimbursement under the TEFRA regulations.

(d) Prospective reimbursement using fixed rates based on both institutional historical costs and group norms. This method is similar to (c) except that not only is the institution's historical cost experience considered in setting rates, but also the costs of similar institutions. Facilities may be grouped by size, location, service mix, and other factors, and are then ranked by cost per facility. Where an

individual facility's cost is higher than the norm for the entire group, the facility is required to either provide justification for the higher costs or not receive reimbursement for the costs in excess of the norm. This methodology is currently employed by New York State.

The current trend is away from retrospective, cost-based reimbursement methods and toward prospective methods. During the past several years, about thirty Blue Cross contracts and fifteen state Medicaid agencies have implemented some form of prospective payment. In addition, Medicare began to phase in a prospective payment system, starting on October 1, 1982. Beginning in year one (FY 1983), Medicare payments were made solely according to the TEFRA legislation, setting rates on a prospective, per discharge basis according to each hospital's base year costs. (Each hospital's own cost experience is based on its FY 1981 allowable costs trended forward by market basket inflation plus one percentage point to account for changes in technology.) During year two (FY 1984), 25 percent of the payment will be based entirely on regional DRG rates and 75 percent will be based on each hospital's own cost experience. In year three (FY 1985), 50 percent of the payment will be based on a blend of national and regional DRG rates (75% regional and 25% national) and 50 percent will be based on each hospital's cost experience. In year four (FY 1986), 75 percent of the payment will be based on a blend of DRG rates (50% national, 50% regional) and 25 percent will be based on each hospital's cost experience. By FY 1987, the entire payment will be based solely on the national DRG rates.

At that point, hospitals will receive a predetermined amount for each patient based on type of illness, regardless of hospitalization costs. (Refer to Chapter II for a list of exceptions.) Consequently, the change from retrospective reimbursement to highly restricted, per discharge

reimbursement will result in greater managerial emphasis on budgeting and cost containment, hospital reorganization and extensive case-mix analysis.

Nursing Home Care. As is the case for hospitals, there are differences among third-party payors with respect to payment for nursing home care. Medicare, for example, reimburses skilled nursing facilities (SNF) but not intermediate care facilities (ICF). All SNFs are currently reimbursed on a reasonable cost basis. However, several proponents of prospective reimbursement suggest that Medicare be required to reimburse nursing homes as well as other health care facilities on a prospective basis. This issue is currently being considered in Congress, and a decision concerning Medicare payment to nursing homes will be made by 1986.

Medicaid covers both SNFs and ICFs, but reimbursement methods vary from state to state. From the inception of Medicaid up until the mid-seventies, most costs were passed through for reimbursement. By 1977, most states were reimbursing nursing homes on a "reasonable cost" basis. However, since then, individual states have been turning to prospective reimbursement, and it is likely that many more will have converted during the next few years.

Few Blue Cross plans provide coverage for nursing services outside an acute care hospital. Because Medicaid and Blue Cross contracts for inpatient and nursing home care vary across the nation, it is essential that the FmHA loan officer be aware of their specific policies in the state in which the applicant is, or will be, located.

Outpatient services. Third-party payors also vary with regard to reimbursement for outpatient services. Medicare continues to reimburse on

a reasonable cost basis. Medicaid, on the other hand, reimburses for outpatient services according to reasonable and customary charges. For the few outpatient services covered by Blue Cross, inpatient reimbursement principles are applied.

Implications for the FmHA Loan Officer. The FmHA loan officer must realize that:

- Reimbursement methodologies have already changed from cost pass-through to markedly restricted reimbursement (due to the passage of TEFRA in 1982 and the Prospective Payment System in 1983, as well as initiatives taken by many state Medicaid agencies and private third-party payors).
- If Medicare's prospective reimbursement system proves to be effective durng the next several years, it is possible that the same methodology will be applied thoughout the entire health care industry.
- Health care facilities may receive less reimbursement when paid on a prospective basis.
- Managers of health care facilities must adapt to decreased financial reimbursement by increasing operating efficiencies and eliminating unnecessary expenditures.
- Sharply limited reimbursement may affect the feasibility of many proposed health care capital projects.

The FmHA loan officer must be aware of changing reimbursement policies and able to determine their impact on an applicant facility's financial status. Specifically, he must know what percentage of an applicant's income is drawn from the various third-party payors and what their respective reimbursement policies are (and will be). The applicant's understanding of reimbursement policies may not always be complete and/or accurate, and it is the loan officer's responsibility to recognize misinterpretations and false assumptions. Rapidly changing reimbursement legislation is having, and will continue to have, a profound effect on the health care industry. However, if the loan officer is aware

of the implications for health care institutions, he will be in a much better position to properly evaluate loan applications.

Cost-Based Rate Determination

Cost-based retrospective reimbursement for hospitals is still used by many Blue Cross plans and Medicaid agencies. Although Medicare is in the process of converting to prospective payment, hospitals' historical costs will still be factored in for the next four years (albeit at a decreasing rate).

The cost-based reimbursement process requires hospitals to determine which costs are allowable (as defined by the particular third-party payor) and then allocate the allowable costs to the respective third-party payors. Although allowable costs vary among third-party payors, generally they consist of all of a hospital's operating expenses plus depreciation and interest less any recoveries of cost and non-allowable costs. Once an institution's total allowable costs have been determined, they are allocated among third-parties according to their patients' usage of the hospital. The formulae for actual cost determination vary by payor.

The amount of reimbursement due cannot be determined until the end of a facility's fiscal year, when actual costs and patient days are known. During the year, payments are made by the third-party on an estimated basis (i.e., a fixed per diem rate or a percentage of standard charges) according to billings by the facility. Two to three months following the end of the fiscal year, a cost report is filed with the third-party (or its intermediary in the case of Medicare and Medicaid), and the amount of reimbursement based on the facility's allowable costs for the fiscal year is determined. The difference between reimbursement due and

interim payments received is the tentative cost settlement. This cost report is subject to a final audit by the third-party (or its intermediary) and may be adjusted if it is incorrect. In some instances, it may be one to two years after submission before a Medicare cost report is finally settled.

Because a large portion of a facility's services are paid for on the basis of cost, the amount of revenue earne by an institution is not necessarily closely related to its charges. For example, if the charges for program patients are $10,000 and the allowable costs are $9,000 the institution will receive only $9,000. The difference of $1,000 is called a contractual allowance and represents the difference between a facility's standard charges and the actual reimbursement received. When third-party reimbursement is limited to cost (or in some cases, cost plus a small amount) a facility often attempts to generate the amount represented by the contractual allowance from commercial insurers or self-paying patients. However, it is not always possible for a facility to make up the contractual allowance in this manner because many self-payors do not pay their bills. Although Medicare and Medicaid regard their beneficiaries/ recipients' unpaid deductibles and co-payments as allowable costs, they do not consider unpaid bills by non-insured patients to be allowable. Therefore, fund drives, endowments, grants, and government subsidies (in the case of public hospitals) must be relied upon to make up most of a contractual allowance.

It is important for the loan specialist to be aware of trends regarding an applicant facility's historical contractual allowances and how the facility has obtained the additional revenue. More important is the

issue of how a facility plans to cope with greater contractual allowances in the future in the wake of rapidly decreasing third-party reimbursement.

Revenue Forecasts

Because of the many sources and methods of payment for health care services, several factors should be considered in reviewing a revenue forecast. Any revenue forecast can be thought of as the product of a forecasted number of units of service times a rate per unit of service. Assuming patient utilization has been properly forecasted, the reviewer should ensure that forecasted rates have been properly determined. The following specific areas must be considered:

- Mix of patients by type of payor
- Terms of agreements with third parties
- Federal and State regulations which could affect rate increases
- Charges of similar institutions in the area.

It is essential that the FmHA loan officer ascertain whether the applicant facility has the management capability for determining optimal charges in accordance with DRG rates and the institution's case-mix. Due to the Medicare prospective payment system facilities will have to alter their charge structures in order to maximize their reimbursement. If an institution does not make the appropriate rate changes (either in-house or through a reputable consultant), the financial consequences could be detrimental.

Patient Mix. Because actual revenue received will depend on who is paying for the service, the facility should have forecast patient mix by class of payor--self-pay, Medicare, Medicaid, Blue Cross, or commercial

insurance. Generally, these forecasts are based on past experience because the mix among payors will not usually change substantially over a short-term.

Payment Methods. The facility should have considered the terms of each third-party contract (available benefits, dollar and service limitations, exclusions, coverage period, etc.) to be sure that forecasted net revenues reflect amounts that will actually be received. This is accomplished by forecasting patient service revenues as well as contractual allowances. From a working capital standpoint, the facility should have accounted for normal lag time in payments made by each of the third-party payors based on experience. In addition, it should have made arrangements for interim payments when appropriate. When cost-based reimbursement accounts for a large portion of a facility's revenue, raising charges will not have a significant effect on net revenue, since reimbursement will be independent of charges (as long as charges exceed costs). In cases where costs exceed charges (as is true for some publicly run institutions) cost based payors will reimburse an amount no greater than charges.

Federal and State Regulations. Rising health care costs have been of great concern to the federal and state governments since the inception of Medicaid and Medicare in the mid-1960s. Since then, many states have enacted legislation which has provided for the establishment of statewide rate controls. In addition, prospective payment legislation has just been enacted. Any revenue forecasts should take into account all existing regulations as well as those which will likely be in effect by the time the facility/service becomes operational.

Areawide Rates. Although some variation in rates among institutions in an area can be justified, projected rates which are higher than the community or regional average may indicate potential problems. The facility should provide information for the past three to five years on inpatient routine service revenue per day, and this should be compared to historical revenues for similar size institutions in the area. Justification should be obtained from the applicant if significant variations from areawide averages occur.

As the federal and state governments take a more active role in reimbursement regulation, the reasonableness of rate increases becomes a more pressing issue. Some persons advocate that increases be adjusted according to a hospital's financial performance in relation to similar hospitals (with regard to facility size, case-mix, teaching status, geographic location, cost of living, etc.). Others believe that it is more appropriate to base each institution's rate increases on its own historical performance, thereby eliminating the influence of other facilities. However, the basis for determining reasonableness of rate increases has not yet been entirely resolved. Issues concerning allowable costs, reimbursement limits and DRG rates are presently being addressed by third-party payors and legislative entities.

DEDUCTIONS FROM REVENUE

There are four major categories of revenue deductions:

- Contractual allowances
- Provision for uncollectible receivables
- Discounts
- Charity allowances.

These four factors represent reductions in the amount which would be received from a facility's standard charges for services. Hospitals are required, under generally accepted accounting principles, to record all services at standard charges and to show any reductions as deductions from revenue. The Statement of Revenue and Expenses for a hospital should follow this format:

Patient service revenue (at standard rates)	xxx
Deductions from revenue	(xx)
Net patient service revenue	xxx

Clinics and nursing homes are not required to record services at standard charges, and therefore, may record only net patient revenue, even though good accounting practice suggests that deductions be recorded. The concept of revenue deductions still pertains to these facilities because full charges are occasionally paid. However, since reimbursement is generally made according to costs and there are few revenue deductions to be made, they are not often reflected in the financial statements.

Contractual Allowances

As mentioned in the previous section on cost-based reimbursement, contractual allowances represent the difference between a hospital's standard charges and the amounts actually reimbursed by third-parties. Typically, contractual allowances are forecasted according to the percentage of deductions from revenue they have represented historically for the hospital as a whole, although a logical refinement of this would be to do so for each third-party payor. The use of an historical percentage is acceptable only if the ratio of costs to charges will remain constant in the future, the terms of third-party agreements will remain unchanged and the mix of patients by payor will remain constant. If any of these factors

is expected to change, a simple forecast of historical relationships will not be adequate. Instead, pro forma reports should have been prepared to forecast reimbursement and contractual adjustments.

Provision for Uncollectible Accounts

The provision for uncollectible accounts represents an estimate of amounts which will not be received because of failure to pay. Because third-parties and commercial insurance companies can be expected to pay (provided a patient is eligible for benefits) the provision is applicable primarily to self-paying patients. The majority of a facility's bad debts are incurred by self-payors, those who have no third-party health care coverage. However, a small percentage of uncollectible accounts can usually be attributed to those who do have coverage but fail to pay their deductibles, coinsurance, or fees for non-allowable costs (such as telephones in patient rooms).

The provision for bad debts should be forecasted according to its historical relationship to either total gross revenues or self-pay revenues. If a change is expected in either the percentage of self-pay patients or general economic conditions, the historical percentage should have been adjusted by the applicant to reflect those changes. Also, it is the loan officer's responsibility to evaluate the applicant's collection procedures to determine whether the collectors are sufficiently aggressive.

Discounts

Occasionally, services are offered by the hospital to employees, medical staff, or others at reduced rates. For example, physical examinations or medications may be purchased at a rate that is lower than that which applies to patients. These discounts should be incorporated

into forecasted revenues by multiplying the number of units of each forecasted discounted service by the forecasted lower price. Although discounts do not generally represent a major reduction in revenue, they should still be considered by the applicant.

Charity Allowances

Charity allowances represent services provided for free or at reduced rates for needy patients. The amount of charity care provided is generally determined by hospital policy. However, there may be federal or state loans which can affect these policies. For example, the Hill-Burton program (which is now defunct) required that any facility which received a grant from that program make a reasonable volume of its services available to the medically indigent by:

- Advising the state that it did not intend to deny anyone admission to the facility because of inability to pay
- Advising the state that its level of uncompensated care would be equal to 10 percent annually of all Hill-Burton assistance received for a period of 20 years.

The discontinuation of the Hill-Burton program has had significant implications for the many facilities which received its financial assistance. Most of them had provided a substantial amount of charitable care for many years in exchange for grants, loans, or low interest rates. After the Hill-Burton program was discontinued, these facilities were still obliged to absorb the costs of all the charitable care that they provided. Despite many appeals by individual hospitals, they were denied public subsidization by TEFRA. Consequently, health care facilities are still responsible for financing their own charitable care.

OTHER OPERATING REVENUE

"Other operating revenue" is income earned in the normal day-to-day operations of the hospital which is not directly related to patient care. It includes revenue from patients for non-patient care services (cafeteria, telephone and television services, beauty parlor, giftshop, etc.). It can also be drawn from persons who are not patients but who also utilize the hospital's services. Examples of such revenue are parking fees, physicians' office rent, and computer fees.

"Other operating revenue" should have been forecasted by specific category. For example, when revenue is related to the number of patients or employees, it can be forecasted by multiplying forecasted employees or patients times forecasted use of services. Historical trends should also have been considered in forecasting other operating income, and any significant forecasted changes from historical trends should be questioned.

NON-OPERATING REVENUE

Non-operating revenue is revenue not related to patient care or the operations of the facility. Examples include earnings on investments (including endowment funds), gifts, and grants from federal and state governments. The amount of non-operating revenue may vary substantially among facilities with regard to absolute amount and percentage of total revenue. Where non-operating revenue is significant, the method of forecasting should be examined closely to ensure that the forecasted revenue is reasonable and that it has been properly reflected in the forecasted financial statements.

Income from endowment funds can be forecasted as the product of expected principal balances times expected yields. Anticipated yields

should reflect realistic but conservative estimates of future market conditions. Certain grants and gifts can and should be supported by contracts or other documents. However, there may be forecasted gifts or grants for which no written support is available. Such forecasts should be questioned, because forecasts of this nature which are based on historical data may be highly subjective. Where substantial revenue is forecasted in this manner, the facility should provide solid evidence that this level can be maintained in the future. Finally, if the donor of funds requires that his endowment be used for a specific purpose, the loan officer must make certain that it will not be used in any other way.

POTENTIAL PROBLEM AREAS

This chapter has introduced numerous factors which must be considered in reviewing an applicant facility's revenue forecast. It has also included a review of third-party payor reimbursement policies and the principal sources of health care revenue. There are two major potential problem areas which the loan officer may encounter during his analysis of revenue forecasts:

- Instability of proposed sources of funds. Where a facility has forecasted substantial revenues from gifts, grants, or sources other than third-party payors, the viability of the project should be questioned. The higher the percentage (i.e., 80 to 90 percent) of third-party reimbursement, the more stable revenue will be.

- Unreasonable assumptions. All assumptions used in forecasting revenue should be clearly stated. When such assumptions are questionable or do not reflect current economic conditions, the proposed project should be questioned.

Chapter VIII includes a discussion of the major financial statements, how their components should be forecasted and the types of assumptions which must be made.

VIII. FORECASTED FINANCIAL STATEMENTS

INTRODUCTION

Forecasted financial statements should be the basis for evaluation of a health care facility's ability to generate sufficient cash to meet its proposed operating and debt service requirements. A forecast which is based on adequate historical operating experience and developed in a logical, objective manner will normally serve as a reliable indicator of the financial feasibility of a proposed course of action.

It is important to consider that forecasted financial statements depend largely on assumptions made about the future and the accuracy of the estimated demand for the forecast period. Determination of the expenses and revenues to be associated with the provision of a particular level of service and completion of forecasted financial statements are actually relatively simple processes which yield a quantitative indicator of project feasibility.

This chapter includes:

- Hypothetical forecasted financial statements
- A discussion of the assumptions and methodologies used to derive demand and utilization forecasts
- The rationale used for making these assumptions.

The "notes" (specified in the case studies in the Appendix) are a supplement to the basic financial information and should be regarded as an integral part of this information.

A financial forecast is an estimate of the most likely financial status of an institution for one or more future periods. Management makes both explicit and implicit assumptions about future events based on information currently available. There is no assurance that the forecasted results will be achieved because a forecast may be affected favorably or unfavorably by unanticipated changes in volume of services, revenues, costs, employee relations, taxes, government controls, and general economic conditions.

The key financial statements used in presenting a forecast are:

- Statement of Revenues and Expenses
- Statement of Cash Flow
- Balance Sheet
- Statement of Changes in Fund Balances.

This chapter revolves around a hypothetical situation in which a 56-bed Community Hospital plans a $2.0 million renovation and expansion project financed by FmHA. Each of the four statements listed above is illustrated for Community Hospital, and explanatory notes are provided in the appended case studies. Note that these statements cover a three-year period (although a five-year forecast period may be more appropriate for expansions having a significant effect on bed size). The forecast period should be limited to the minimum number of years necessary to demonstrate an institution's ability to meet its obligations and should usually commence within six months of the proposed date of financing. Also, it should extend through one full year of operation of the new or expanded facility following completion of construction (generally resulting in a forecast period of 3-5 years).

A general description of the project (including a statement of "Sources and Uses of Funds") should accompany the forecasted statements.

(See Note 1 in the Hospital Case Study in the Appendix). All available funding sources should be included and the total amount of money available from these souces should clearly cover the anticipated cost of the project. Specific expenses for which an FmHA loan may be used are:

- Planning costs (including fees for legal, engineering, architectural, consulting and recording services)
- Interest payments (in connection with loans to be repaid) until the facility is able to generate sufficient revenue to be self-supporting (normally limited to a three-year period)
- Construction, renovation, expansion, or purchase of existing facility (and related costs)
- Acquisition of land or land improvements (and related costs)
- Purchase or lease of fixed and major movable equipment (and related costs)
- Initial operating expenses if borrower is unable to pay them (normally limited to one year of expenses)
- Refinancing other debt if:

  --That debt is secondary to the FmHA loan
  --The debt was incurred in order to undertake the project
  --Existing debt terms cannot be modified or extended

- Payment of project-related costs which were incurred before approval of the FmHA loan (provided they were incurred for authorized loan purposes and contract documents have been approved by FmHA).

STATEMENT OF REVENUES AND EXPENSES

Definition and Purpose

The statement of revenues and expenses is a record of revenues and expenses for a given period. A detailed statement is shown in Figure VIII-1. A comparison of forecasted statements of revenues and expenses with recent historical statements reflects the ability of management to effectively and efficiently control the facility. Specifically, such a

comparison may indicate the degree of financial control, the need for services already being provided, the ability of the institution to attract a sufficient number of new physicians and patients and, of course, the need for the proposed facility/service.

Again, when forecasting patient service revenue, an applicant should use accrual accounting; that is, it should record revenues and expenses when services are provided and debts are incurred rather than when payments are received and actual expenditures are made.

Expenses

Since revenue forecasts are still based on forecasted costs where retrospective reimbursement is concerned, operating expenses must be estimated first. The forecast of operating expenses is based on the units of service forecasted for each of the facility's departments. Thus, the FmHA loan officer must be satisfied that the forecasted utilization figures are reasonable. Units of service for both revenue-producing and general service departments should be compared with past experience and industry averages to ensure that the workloads used are reasonable and have been applied consistently (both historically and during the forecast period).

Personnel-Related Expenses. Salary and wage expenses constitute the largest portion (about 50%) of an institution's operating expenses. The forecasted staffing patterns developed by management should be reviewed to ensure that:

- Estimates of future personnel requirements reflect existing and proposed staffing patterns, proposed changes in physical plant layout, and anticipated changes in the methods of delivering service.

- Staffing forecasts reflect the timing of the opening of new patient service areas.
- Full-time equivalent (FTE) estimates incorporate staffing coverage for vacations, holidays, sick time, weekends, etc. Any contemplated changes in work patterns should also be considered.

Preliminary staffing estimates for expanded or renovated facilities should be compared with the institution's historical ratio of FTES per occupied bed and with regional statistics for comparable institutions. Once forecasted staffing patterns are established, salary costs can be calculated using current wage and salary rates by employee classification and an estimated inflation rate. However, these rates must be adjusted to reflect competitive pay rates, union contracts, minimum wage requirements, etc. The financial impact of any proposed changes in personnel policies and fringe benefits should be assessed and reflected in both the forecasted balance sheet and statement of revenues and expenses.

In many inpatient health care facilities, radiologists, pathologists, anesthesiologists, and other medical specialists are reimbursed for their services by the institution. Proposed changes in contracts with these specialists should be analyzed for their effects on future operations. (See discussion of Professional Fee Expenses in Chapter VI.)

Non-Personnel Operating Expenses. The costs of supplies, inventories, short-term interest, rental and leasing agreements, utilities and malpractice insurance must also be included in the institution's total operating expenses. (Refer to Chapter VI for specific methods of cost determination and forecasting.)

Non-Operating Expenses. The institution's proposed project may have a major impact on forecasted depreciation and amortization. As

mentioned in Chapter VI, estimates of depreciation expenses for present and proposed services or equipment should be based on the expected useful lives and either actual cost from bids, or guaranteed maximum prices. These estimates should reflect gains and losses on disposal of existing assets. All project costs, including architectural and legal fees, interest expense (net of interest income investments) and amortization of bond discounts during the execution of the project, should be capitalized and depreciated. (Refer to Chapter VI for detailed methods of capital expense determination.)

Revenue

Using accrual accounting, an institution's historical cost-to-charge relationship by major type of service (i.e., routine, special service, outpatient) should be applied to forecasted costs to arrive at preliminary estimates of revenue by service. The resulting percent revenue increases should be compared for reasonableness with rates of other institutions in the same service area. Also, when estimating revenue, the institution must consider utilization levels. Furthermore, future gross margins (gross charges less operating expenses) by service department should be compared to historical margins.

Deductions from revenue include allowances that represent differences between gross revenue charges and actual amounts received from patients or third-party payors for services rendered, including a provision for uncollectible accounts. Deductions from revenue include:

- Charity allowances--the difference between gross revenue charges at established rates and amounts received from indigent patients, voluntary agencies, or governmental units on behalf of specific indigent patients.

- Courtesy allowances or policy discounts--the difference between established rates and amounts recovered for services provided for doctors, clergymen, employees, and employee dependents.

- Contractual adjustments--the difference between billings at established rates and amounts received from third-party payors under contractual agreements.

- Uncollectible accounts--the difference between billings at established rates and the amounts actually received from patients. This category includes mainly self-pay patients since third-party payors are a reliable source of contractual payments. It excludes non-payment by indigent patients, which is included in the charity allowance.

Forecasted gross revenues should be classified into categories by type of payor. Contractual allowances should also be calculated by type of payor on the basis of current contracts plus any anticipated changes, and then compared with historical allowances. They should then be applied to forecasted gross revenues along with historical percentages of bad debts, policy discounts, and charity allowances in order to determine forecasted net revenues.

Other operating revenue not related directly to patient care includes income from cafeteria sales, nursing school tuition, sale of medical history transcripts, etc. Again, forecasts of these items should be based on historical trends, expected changes in operations, and forecasted activity levels.

Forecasts of other non-operating revenue (consisting mainly of endowments, unrestricted gifts, government grants, and interest earned on trustee funds) can be based on historical trends. However, past experience is not always a reliable indicator of these revenues. Many gifts, grants, and endowments are one-time contributions, and further contributons will not likely be received at a constant rate in the future. Recognition should be given to any restrictions on endowment income and to reduction of

income from invested funds to be used in financing the contemplated construction program. Anticipated revenue from future pledge drives should not be included in the forecasted statement of revenues and expenses. However, actual pledges, less an estimated provision for uncollectible amounts, can be included. The estimated collectibility of pledges should be well-supported since the extent to which pledges are collected can have a significant impact on the financial feasibility of some applicants' proposed projects.

STATEMENT OF CASH FLOW

Cash flow statements indicate the movement of cash into and out of an institution during a certain period by detailing cash movements summarized in the balance sheet (See Figure VIII-2 for an example.) Forecasted cash flow statements should be based on historical cash flows as well as assumptions about future internal operations and external conditions. For a project to be considered financially feasible, it must be able to generate sufficient cash to meet operating expenses, working capital needs, and debt service requirements during the forecast period.

As shown in Figure VIII-2, the cash balance at the end of each forecasted year is derived by:

- Adding the forecasted "excess of revenues over expenses" (or subtracting the forecasted deficit) to the cash balance which exists at the onset of the forecasted period. This excess revenue (deficit) represents the net income for the year and should coincide with the "bottom line" (or net income) of the Statement of Forecasted Revenues and Expenses.

- Adding back items charged against operations in the Statement of Forecasted Revenues and Expenses which do not require cash (such as depreciation and amortization expense). Although items of this nature reduce the net income for the year, they do not actually represent cash outflows. Hence, they must be added back to arrive at a realistic estimate of the cash balance at the end of the year.

- Adding (deducting) changes in accounts payable, which are generally forecasted according to the historical ratio of accounts payable to total operating expenses and any anticipated changes which would affect accounts payable.

- Adding (deducting) changes in accounts receivable, generally forecasted according to the historical relationship of accounts receivable to net patient service revenue and any expected changes which would affect accounts receivable. Changes in accounts receivable can be attributed to either third-party payors, self-payors, or insured patients who are responsible for deductibles and copayments.

- Adding any other sources of cash including:

  --Estimated proceeds from bond issues or loan proceeds
  --Estimated proceeds from fund drive
  --Contributions, bequests, donations, etc. (based on historical experience and current expectations)
  --Transfers from restricted funds

- Deducting any other anticipated cash expenditures such as:

  --Additions to property, plant, and equipment during the forecast period (based on capital budgets prepared by the institution's management)
  --Reduction of long-term debt (based on amortization schedules for current debt and proposed redemption provisions for future debt)
  --Construction cost payments (based on engineers' or architects' renovation estimates and timetables)
  --Transfers to restricted funds
  --Interest payments (based on rates and maturities of current and future long-term debt)
  --Increase in receivables, inventories, and prepaid expenses.

In addition to adjusting the current cash flow for all anticipated cash inflows and outflows, inflationary allowances should be made when appropriate.

The arithmetic accuracy of the forecasted cash flow statements can be tested by inserting the year-end cash balance into the balance sheet. Total assets should equal total current and long-term liabilities plus total fund balances. If the cash flow forecast is valid, then an appropriate decision can be made about the adequacy of future cash availability. If a cash deficit is forecast (and is expected to be only

temporary) short-term borrowing will likely be needed. On the other hand, if an excessive cash surplus is forecast, additional investments may be indicated. However, if unusually high or low cash balances are forecast, the basic assumptions underlying the forecast should be challenged.

BALANCE SHEET

The balance sheet, which lists total assets, liabilities, and net worth (or fund balances), indicates the overall financial position of an institution at a given point in time. The forecasted balance sheets for Community Hospital are shown in Figure VIII-3. Comparison of financial performance during a fiscal year to that of preceding years can provide insight into the stability and capabilities of an institution. Also, properly developed forecasted balance sheets can provide a basis for evaluating future risks. Generally, a minimum of three years of audited financial statements are needed to serve as a basis for a sound financial forecast.

Historical trends must be identified for individual items in the current assets and current liabilities sections of the balance sheet so that the appropriate ratios can be developed and used to forecast those items. Examples of useful ratios are inventories as a percentage of supply expense and wages payable as a percentage of salary and wage expense.

A detailed capital budget should be prepared to forecast fixed assets. Policies regarding depreciable lives and scheduled retirements of existing assets determine the allowance for depreciation during the forecast period. Final cost estimates for a proposed project (including interest paid during the implementation of the project) should be allocated by type of asset and depreciated accordingly. In addition, loan payments

made during implementation, related financing expenses (such as consulting and legal fees and commissions) and start-up costs should be amortized, generally over the payback period of the related debt.

Long-term debt previously incurred by an institution must be analyzed to determine principal payments due during the forecast period. This forecasted balance sheet item should also be adjusted for any debt financing which the capital budget indicates will be necessary for planned acquisitions.

Net worth, or owners equity, when added to total liabilities, must equal total assets of the institution. Net worth consists of capital (stated value of capital stock in an investor-owned institution) and retained earnings. It is shown as the fund balance on the balance sheet for a nonprofit health care facility.

The FmHA loan officer should be aware of the fact that most nonprofit hospitals practice fund accounting, in which separate accounts are maintained for restricted and nonrestricted funds. Each fund is treated as a separate entity, requiring an independent set of financial statements. There is usually an account for:

- Unrestricted Funds

  --General Fund--funds that bear no external restrictions on use
  --Board-Designated Funds--unrestricted funds set aside by the governing board for specific purposes.

- Restricted Funds

  --Specific Purpose Funds--funds restricted by donors for specific purposes
  --Plant Replacement and Renewal Funds--funds for replacement or renewal of plant.

STATEMENT OF CHANGES IN FUND BALANCES

Figure VIII-4 includes three sets of Forecasted Statements of Changes in Fund Balances for Community Hospital. Each set includes changes in fund balances for a specific forecasted year, and all sets address the same three funds (unallocated funds, funds invested in properties and Board-designated funds for mortgage repayment) for purposes of comparison. To calculate the change in fund balances from one year to the next, the fund balance at the end of the first year must be adjusted for the next year's revenues and expenses, interest earned, pledges received and transfers to and from other funds. Of course, a forecasted fund balance is based on anticipated additions and deductions.

When evaluating the feasibility of a proposed project, it is essential that the loan officer be aware of all pertinent trends in fund balance changes. He must be assured not only that the appropriate funds will be used but also that there will be sufficient funding available to support the project.

IMPLICATIONS FOR THE FMHA LOAN OFFICER

Forecasted financial statements are the fundamental basis for determining whether an applicant facility is capable of generating sufficient revenue to maintain its current operations, fulfill its debt repayment obligations and absorb the additional costs associated with the projected capital expansion. Although it is clearly the responsiblity of the applicant to provide these statements and to use them for justification of the project, it is the loan officer's responsibility to ensure that the historical financial information is accurate, that the assumptions made about the future are reasonable and that the trends are logically and correctly related to the project.

This chapter has provided an overview of the major forecasted financial statements which can be used to assess the feasibility of a proposed capital expansion. Chapter IX provides a detailed discussion of financial ratios, how they relate to these financial statements and their usefulness in determining project feasibility.

FIGURE VIII-1

STATEMENTS OF FORECASTED REVENUES AND EXPENSES

COMMUNITY HOSPITAL

Years Ending March 31,

	1983	1984	1985
STATISTICS (excluding newborn):			
Average beds available	56	58	60
Patient days	13,590	13,770	13,950
Average occupancy percent	66.5	65.0	63.7
OPERATING REVENUE			
Patient revenues - Notes 1, 2, 3	$1,736,400	$1,981,200	$2,196,000
Other operating revenues - Note 5	20,000	21,000	22,000
GROSS OPERATING REVENUES	1,756,400	2,002,200	2,218,000
Provision for allowances and adjustments (deduction) - Note 4	(128,300)	(146,600)	(153,400)
NET OPERATING REVENUES	1,628,100	1,855,600	2,064,600
OPERATING EXPENSES			
Salaries, wages, and fringe benefits - Note 6	998,600	1,088,100	1,164,700
Supplies and other expenses - Note 6	584,700	674,700	740,500
Interest - Note 8	5,000	29,400	61,200
Depreciation - Note 7	27,600	49,800	74,200
TOTAL OPERATING EXPENSES	1,615,900	1,842,000	2,040,000
EXCESS OF OPERATING REVENUES OVER EXPENSES	12,200	13,600	24,000
NON-OPERATING REVENUE (interest earned)	100	1,900	2,200
EXCESS OF REVENUES OVER EXPENSES	$ 12,300	$ 15,500	$ 26,200

The accompanying letter and notes to financial statement forecasts are an integral part of these statements.

FIGURE VIII-2 STATEMENTS OF FORECASTED CASH FLOW

COMMUNITY HOSPITAL

Years Ending March 31,

	1983	1984	1985
Balance at beginning of period	$ 41,700	$ 64,400	$102,100
Add cash provided from:			
Excess of revenues over expenses- Notes 1, 2, 3, 4, 5, 6, 8	12,300	15,500	26,200
Add items charged to operations not requiring cash:			
Depreciation- Note 7	27,600	49,800	74,200
CASH PROVIDED FROM OPERATIONS AND NONOPERATING REVENUE	39,900	65,300	100,400
Increase (decrease) in accounts payable	2,800	32,700	12,800
Increase (decrease) in accounts receivable	(10,500)	3,000	2,500
Increase (decrease) in other liabilities	39,600	(39,600)	-0-
Proceeds from long-term borrowing	494,500	695,500	-0-
TOTAL CASH PROVIDED	566,300	756,900	115,700
TOTAL CASH AVAILABLE	608,000	821,300	217,800
Deduct cash expended for:			
Additions to property and equipment - Notes 1, 7, 8	452,700	671,600	5,000
Payments on long-term debt, net of changes in current maturities	3,100	4,700	10,700
Payment on notes payable to bank	-0-	25,000	25,000
Increase in receivables, inventories and prepaid expenses	87,800	17,900	400
TOTAL CASH EXPENDED	543,600	719,200	41,100
BALANCES AT END OF PERIOD	$ 64,400	$102,100	$176,700
Balance at end of period consisting of:			
Cash available for operating purposes	$ 64,400	$ 82,700	$150,400
Reserve for mortgage payments - Note 8	-0-	19,400	26,300
	$ 64,400	$102,100	$176,700

The accompanying letter and notes to financial statement forecasts are an integral part of this statement.

FIGURE VIII-3 FORECASTED BALANCE SHEETS

COMMUNITY HOSPITAL

March 31,

	1983	1984	1985
ASSETS			
CURRENT ASSETS - Notes 4, 9			
Cash	$ 64,400	$ 82,700	$ 150,400
Accounts receivable, less allowances	420,600	432,400	427,700
Inventories	42,600	47,400	51,500
Prepaid expenses	10,000	11,300	12,300
TOTAL CURRENT ASSETS	537,600	573,800	641,900
OTHER ASSETS			
Reserve for unemployment compensation	1,900	1,900	1,900
Reserve funds accounts for mortgage repayment - Note 8	-0-	19,400	26,300
PROPERTY AND EQUIPMENT - Notes 1, 7, 8			
Land and land improvements	7,200	7,200	7,200
Building and fixed equipment	558,900	1,707,800	1,707,800
Hospital, office, and other equipment	117,400	156,800	161,800
Construction in progress	516,700	-0-	-0-
Allowances for depreciation (deduction)	(354,600)	(404,400)	(478,600)
TOTAL PROPERTY AND EQUIPMENT	845,600	1,467,400	1,398,200
TOTAL ASSETS	$1,385,100	$2,062,500	$2,068,300
TOTAL ASSETS	$1,385,100	$2,062,500	$2,068,300

	1983	1984	1985
LIABILITIES AND FUND BALANCES			
CURRENT LIABILITIES - Notes 6, 7, 9			
Notes payable to bank	$ 50,000	$ 25,000	$ -0-
Accounts payable	86,200	99,100	107,800
Salaries, wages and amounts withheld therefrom	59,900	65,300	69,900
Amounts withheld from contractors pending construction completion	39,600	-0-	-0-
Accrued interest payable	800	15,200	14,700
Advances from third-party payors	21,000	24,000	26,500
Current maturities of long term debt	3,100	10,700	10,100
TOTAL CURRENT LIABILITIES	260,600	239,300	229,000
LONG-TERM DEBT - Notes 1, 8			
Construction loan	494,500	-0-	-0-
Mortgage payable, less current maturity	-0-	1,178,800	1,168,700
Equipment purchase contract	1,100	-0-	-0-
TOTAL LONG-TERM DEBT	495,600	1,178,800	1,168,700
FUND BALANCES			
Unallocated	282,000	347,100	424,900
Invested in properties, less long-term debt including current maturities	346,900	277,900	219,400
Reserve funds designated by board for mortgage repayment- Note 8	-0-	19,400	26,300
TOTAL FUND BALANCES	628,900	644,400	670,600
TOTAL LIABILITIES AND FUND BALANCES	$1,385,100	$2,062,500	$2,068,300

The accompanying letter and notes to financial statement forecasts are an integral part of this statement

FIGURE VIII-4 FORECASTED STATEMENTS OF CHANGES IN FUND BALANCES

COMMUNITY HOSPITAL

	COMBINED	UNALLOCATED	INVESTED IN PROPERTIES	BOARD DESIGNATED FUNDS FOR MORTGAGE REPAYMENT RESERVE
Fund balances at April 1, 1982	$616,600	$203,400	$413,200	$ -0-
Excess of revenues over expenses	12,300	12,300		
Interfund transfers:				
Provision for depreciation charged to operating expenses		27,600	(27,600)	
Property and equipment acquired		(452,700)	452,700	
Mortgage and installment contract payments		(3,100)	3,100	
Mortgage and construction loans		494,500	494,500	
TOTAL TRANSFERS		66,300	(66,300)	-0-
FUND BALANCES AT MARCH 31, 1983	628,900	282,000	346,900	
Excess of revenues over expenses	15,500	15,500		
Interfund transfers:				
Provision for depreciation charged to operating expenses		49,800	(49,800)	
Property and equipment acquired		(671,600)	671,600	
Mortgage and installment contract payments		(4,700)	4,700	
Mortgage and construction loans		695,500	(695,500)	
Net cash transfers		(19,400)		19,400
TOTAL TRANSFERS		49,600	(69,000)	19,400
FUND BALANCES AT MARCH 31, 1984	644,400	347,100	277,900	19,400
Excess of revenues over expenses	26,200	26,200		
Interfund transfers:				
Provision for depreciation charged to operating expenses		74,200	(74,200)	
Property and equipment acquired		(5,000)	5,000	
Mortgage and installment contract payments		(10,700)	10,700	
Mortgage and construction loans		(6,900)		6,900
Net cash transfers				
TOTAL TRANSFERS		51,600	(58,500)	6,900
FUND BALANCES AT MARCH 31, 1985	$670,600	$424,900	$219,400	$ 26,300

The accompanying letter and notes to financial statement forecasts (in hospital case study, Appendix) are an integral part of this statement.

IX. FINANCIAL RATIO ANALYSIS

INTRODUCTION

In order to determine the financial feasibility of a proposed project, the FmHA loan officer should determine:

- The facility's overall financial status
- Its ability to maintain operations and repay the proposed debt
- The capabilities of the facility's management.

Ratio analysis of historical financial reports (if the facility has prior operating experience) and of forecasted financial statements is a method often used to perform such an evaluation.

Ratio analysis facilitates assessment of financial data. However, it is just a starting point for evaluating financial operations; it is neither a primary nor an independent tool of analysis. Ratios merely express a relationship between two figures, preserving the nature of the relationship while eliminating differences in absolute size. Once a range of accepted ratio values is established for a given criterion, values for a given institution can then serve as indicators of performance.

RATIO ANALYSIS LIMITATIONS

Ratios may reveal imbalances in the allocation of a facility's resources and identify areas in which further analysis is needed. The

extent to which ratio analysis points out these problem areas depends on the ratios themselves; they are only as reliable as the figures upon which they are based. Also, the assumptions related to proposed service utilization and forecasted revenues and expenses must be critically evaluated before any reliability can be placed on the ratios with respect to future performance.

As mentioned earlier, standards or ranges must be established to serve as guidelines for estimating financial feasibility. However, strict reliance on these standards should be avoided as there are many reasons for "abnormal" ratio values, in addition to financial mismanagement or inefficiency. Factors which can affect ratio values are size of the institution, geographical location, patient mix (demographic characteristics), case mix (type of services delivered), seasonal trends, type of ownership, affiliations with teaching programs, etc.

An additional limitation of ratio analysis is that ratios may be derived from financial statements which are not uniformly presented. Loan officers employing ratio analysis must have a basic understanding of accounting fundamentals and the nature of the figures which comprise the ratios. Even with this understanding, however, they should not depend upon a few ratios alone in determining project feasibility. Operating efficiency indicators (see Chapter X), such as cost per patient day and full-time equivalent employees per occupied bed, must be considered along with an assessment of the facility's debt service coverage and its ability to maintain operations.

Financial ratios which may be useful in determining project feasibility can be grouped into four categories:

- Profitability
- Liquidity
- Leverage
- Activity.

Each category of ratios, as well as the most frequently used individual ratios, are discussed in this chapter. All ratio values cited were obtained from The Hospital Industry Analysis Report, published in 1981 by the Health Care Financial Management Association. These values (median and range) should be used only as guidelines by the FmHA loan officer, not as acceptable standards, because:

- The survey sample included short-term hospitals which were categorized only by size; only facilities with fewer than 200 beds were included.
- The ranges represent extreme values (the highest and the lowest) obtained from the survey sample, not desired limits.

PROFITABILITY RATIOS

Profitability is an extremely important concept in the hospital industry. Few hospitals could remain financially viable without a profit, or excess of revenues over expenses, for a long period of time. Cash flow would simply not be sufficient to meet normal cash flow requirements such as debt principal and investment in fixed or current assets. The presence or absence of profit in a hospital has a pervasive effect on most other ratios. For example, low values of profit may adversely affect liquidity ratios and sharply reduce debt repayment ability.

Not-for-profit health facilities, by definition, do not earn a return on invested capital, or fund balance. Both operating and non-operating revenues, technically, should just be large enough to meet the operating expenses of the facility. In reality, however, even a

nonprofit institution must have an excess of revenues over expenses if it intends to expand or develop its services. Some profit objectives beyond the generation of funds for purchasing materials, paying personnel, and paying for the operation and maintenance of physical plant must be set. Profitability ratios reflect the earning ability of a facility.

$$\text{Deductible Ratio} = \frac{\text{revenue deductions}}{\text{gross patient service revenue}}$$

This ratio indicates the proportion of gross patient service revenue which is not expected to be realized in cash because of contractual allowances, bad debts, employee discounts, and charity care. Values for this ratio have been rising slowly but steadily over the past several years, suggesting that hospitals are having increasing difficulty securing funds to cover total expenses. Specifically, the national median value for hospitals with fewer than 200 beds increased from .11 in 1978 to .13 in 1981. (See Table IX-1.) Because prospective reimbursement will be utilized to a greater degree in the future, total reimbursement for health care services may decline, resulting in further increases in deductible ratios.

$$\text{Markup Ratio} = \frac{\text{gross patient service revenue} + \text{other operating revenue}}{\text{operating expenses}}$$

The markup ratio indicates the relationship between total revenues and expenses. High markups in conjunction with low deductibles will result in high levels of operating profit. Markups have been increasing slightly since 1978; Table IX-1 shows that the 1978 national median value of 1.15 rose to 1.18 in 1981. This increase may have been caused by attempts within the hospital industry to boost rates with the intention of collecting more funds from charge-payors (self-payors and commercial insurance companies).

$$\text{Operating Margin} = \frac{\text{total operating revenue} - \text{operating expenses}}{\text{total operating revenue}}$$

This ratio indicates the proportion of operating revenue which is retained as income. It is a function of the markup and deductible ratios. As Figure IX-1 shows, operating margins among small hospitals have remained relatively stable during recent years. This may be explained by the fact that the revenue gained from increased markups has been cancelled by the revenue lost due to increased deductibles.

$$\text{Non-operating Revenue Ratio} = \frac{\text{non-operating revenue}}{\text{excess of revenues over expenses}}$$

This ratio indicates the proportion of net income that was derived from non-operating sources. High values suggest a facility's ability to partly subsidize poor operating margins. The national ratio value has increased during the past few years, rising from .27 in 1978 to .36 in 1981. In view of the stabilization of operating margins in recent years, the rising values of non-operating revenue ratios enhance overall hospital profitability. However, because future operating margins may decline with prospective reimbursement, overall profitability may decrease unless further non-operating revenues can be secured.

$$\text{Return on Total Assets} = \frac{\text{excess of revenues over expenses}}{\text{total assets}}$$

The return on total assets, defined as the amount of net income earned per dollar of investment, is a widely used measure of profitability. Return on total assets has increased in the hospital industry since 1978. The national median value increased from .04 in 1978 to .05 in 1981. The primary reason for this improvement may be the increase in the non-operating revenue component.

$$\text{Return on Equity} = \frac{\text{excess of revenues over expenses}}{\text{fund balance}}$$

The return on equity is defined as the amount of net income earned per dollar of unrestricted fund balance. This ratio has also increased for small hospitals since 1978. The national median value increased from .07 in 1978 to .08 in 1981.

When evaluating any of these ratios, the FmHA loan officer must put their values in the proper perspective by comparing them with ratios obtained from previous years' figures. Profitability changes can reflect changes in services provided, types of patients served or level of efficiency. Likewise, the loan officer should compare profit margins with those calculated for similar facilities in the same area. An unusually low (or high) amount of profit in relation to similar area facilities may indicate a particularly weak (or strong) financial structure.

LIQUIDITY RATIOS

Liquidity ratios provide a general indication of whether an institution's assets are sufficient to meet its short-term obligations. Many of the financial problems experienced by health care institutions result from liquidity crises, when they are unable to pay their debts as they come due. Because a deteriorating liquidity position is often the first symptom of a major problem in financial management, liquidity ratios can be extremely useful as general guidelines.

$$\text{Current Ratio} = \frac{\text{current assets}}{\text{current liabilities}}$$

The current ratio is defined as the number of dollars held in current assets per dollar of current liabilities. It is an indicator of an institution's ability to pay current liabilities and is perhaps the most widely used measure of liquidity.

In general, the more profitable hospitals are able to maintain better liquidity positions, and therefore, have higher current ratios. However, there has been a pattern of decline in current ratios during the last four years, suggesting a slight decrease in the profitability of health care institutions. Health care facilities sometimes experience difficulty in collecting accounts receivable, which results in lower current assets, lower current ratios, and a greater possibility for liquidity crises. On the other hand, a very high current ratio may indicate an overly conservative operating philosophy. For example, failure to take advantage of a supplier's credit terms for prompt payment or tying up capital in excessive inventory suggest less than optimal efficiency.

As indicated in Figure IX-1, current ratio values have declined since 1978. Specifically, the national median value of 2.09 for that year dropped to 1.91 in 1981. Again, the loan officer must recognize that while these ranges can be used as guidelines, factors such as geographical location and facility size can significantly affect current ratio values.

$$\text{Quick Ratio} = \frac{\text{quick assets}}{\text{current liabilities}}$$

Quick assets (cash + marketable securities + available accounts receivable) are current assets which can be used as cash on short notice with little, if any, decline in book value. The quick ratio measures the number of dollars of liquid assets which are available per dollar of current liabilities and is therefore a more stringent measure of liquidity than the current ratio.

In general, the magnitude of the quick ratio is positively correlated to overall profitability. As is the case with the current ratio, there has been a gradual decline in the value of the quick ratio in

the hospital industry during the past several years. As indicated in Figure IX-1, the 1978 national median value of 1.63 decreased to 1.57 in 1981.

Again, these values are acceptable guidelines, but the loan officer must be attuned to the extenuating circumstances of each health care facility. If a facility's quick ratio value is well below the national median, it should be investigated by the loan officer to ensure that the institution's liquidity position is satisfactory.

$$\text{Acid-Test Ratio} = \frac{\text{cash + marketable securities}}{\text{current liabilities}}$$

The acid-test ratio, the most stringent test of liquidity, is defined as the number of dollars in cash and marketable securities which are available per dollar of current liabilities. Acid-test ratio values have also declined during the past several years in the hospital industry, as shown in Figure IX-1. In 1981, the nationwide median value was .21, down from .27 in 1978. If an institution's acid-test ratio is below the current national median, it should be questioned and analyzed by the loan officer.

The preceding three ratios are the most frequently used liquidity ratios in the hospital industry. The nationwide values of all three have declined during the past four years. Consequently, the FmHA loan officer should be aware that the change in the hospital industry's overall liquidity position may have important implications for future capital expansion projects. Following are three additional measures which are more specific indicators of an institution's liquidity status.

$$\text{Days in Patient Accounts Receivable} = \frac{\text{net patient accounts receivable}}{\left(\frac{\text{net patient service revenue}}{365}\right)}$$

This ratio indicates the average time period that receivables are outstanding (or the average collection period). The average collection period of 64.11 days in 1978 had declined to 59.49 days in 1981. This modest reduction may reflect favorably on management, suggesting that collection procedures are being implemented more aggressively. On the other hand, it may reflect different write-off policies. An unusually long average collection period should indicate to the loan officer that payments are not being collected quickly enough, preventing the institution from making timely use of those funds.

$$\text{Average Payment Period} = \frac{\text{current liabilities}}{\left(\frac{\text{operating expenses - depreciation}}{365}\right)}$$

The average payment period ratio provides a measure of the average time that elapses before current liabilities are paid. During the four-year period for which data was collected, this value remained relatively stable; the 1978 national median of 47.40 days increased very slightly to 47.68 days in 1981. Values substantially higher than the median may indicate current or potential liquidity problems.

$$\text{Days of Cash on Hand} = \frac{\text{cash + marketable securities}}{\left(\frac{\text{operating expense - depreciation}}{365}\right)}$$

This ratio measures the number of days of average daily cash expenses that a hospital maintains in cash and marketable securities. Between 1978 and 1981, the number of days of cash kept on hand for small hospitals nationwide declined appreciably. Specifically, the 1978 median value of 13.54 declined to 10.39 by 1981.

The Hospital Industry Analysis Report from which these statistics are drawn indicates that during the four-year study period, 25 percent of

all U.S. hospitals operated with fewer than five days of cash on hand. Such low values for this ratio may indicate that liquidity problems exist.

LEVERAGE RATIOS

Leverage (or capital structure) ratios are extremely useful for determining a facility's ability to increase its proportion of debt financing. In the past twenty years, there has been a steady trend toward increased debt financing within the health care industry. Leverage ratios have been, and will continue to be, valuable indicators of the industry's capacity to continue along that trend. Because leverage ratios are so widely used by creditors, their values often have a significant influence on the amount of funding an institution is able to secure.

$$\text{Equity Financing Ratio} = \frac{\text{fund balance}}{\text{total assets}}$$

The equity financing ratio measures the proportion of total assets that have been financed with equity. High values for this ratio suggest that the institution uses relatively little debt financing. Nationwide equity financing ratios for small hospitals have decreased slightly during the past four years, suggesting a greater reliance on debt financing. Two likely reasons for this trend are:

- Operating margins are becoming less adequate for the financing of normal capital expansions and improvements due to inflation, and
- Fewer grants and endowments are available to health care facilities.

The national median value of .58 in 1978 fell to .56 by 1981, as shown in Figure IX-1.

$$\text{Cash Flow to Total Debt} = \frac{\text{excess of revenues over expenses + depreciation \& amortization}}{\text{current liabilities + long-term debt}}$$

This ratio, which expresses the amount of cash flow in proportion to total liability, can be an important indicator of potential financial problems. The national median value for this ratio has increased from 0.18 in 1978 to 0.19 in 1981. Despite this increase, the absolute value of the average hospital's cash flow is considered to be relatively low (in comparison to other industries) by many financial analysts. Therefore, the loan officer should carefully assess the ratio of cash flow to total debt.

$$\text{Long-Term Debt To Equity} = \frac{\text{long-term liabilities}}{\text{fund balance}}$$

This ratio represents the proportion of long-term debt to unrestricted fund balance. Higher values indicate a greater reliance on debt financing and a reduced ability to carry additional debt. During the past four years, the national median value for this ratio has increased from .37 to .46. This substantial increase has likely been caused by continual replacement of fixed assets at increasingly inflated prices.

$$\text{Times Interest Earned} = \frac{\text{excess of revenues over expenses + interest earned}}{\text{interest expense}}$$

This ratio signifies the multiple by which current interest expense is being met by current income. Higher values for this ratio usually imply greater debt repayment ability. Times interest earned ratios have generally increased among small hospitals during this four-year period. Although the 1978 national median of 3.41 increased by 8 percent to 3.69 in 1981, one-quarter of all hospitals of all sizes had values below 1.84 in 1981. A value of 1.5 is the generally accepted minimum value for adequate interest coverage.

$$\text{Debt Service Coverage} = \frac{\text{excess of revenue over expenses} + \text{interest expense earned} + \text{depreciation} + \text{amortization}}{\text{principal payment} + \text{interest payment}}$$

The debt service coverage ratio indicates the extent to which a facility is able to fulfill long-term debt obligations. The value is computed by adding net income, interest charges and items charged against operations which do not require a cash outlay and dividing the sum of these amounts by the annual debt service. As is the case with the times interest earned ratio, higher values for debt service coverage indicate greater debt repayment ability. Debt service coverage ratios have steadily increased in the hospital industry during the past several years, suggesting improved capability for meeting financial obligations. The 1978 national median value of 2.76 increased to 3.30 in 1981. Using 1.5 as the generally accepted minimum value, there appear to be few hospitals having difficulty meeting their obligations. This may reflect larger depreciation flows from relatively new facilities that have been debt financed.

$$\text{Debt per Bed} = \frac{\text{Long-term debt}}{\text{Total available beds}}$$

Debt per bed is calculated by dividing the hospital's long-term debt (including the proposed financing) by the total bed complement of the hospital after completion of the project currently being financed. Debt per bed typically falls in the range of $25,000 to $60,000.

ACTIVITY RATIOS

Activity ratios specify the relationship between revenue and assets, indicating the extent to which the various categories of assets are used to generate revenue. These ratios are sometimes referred to as efficiency ratios because they actually indicate the relationship between outputs (revenue) and inputs (assets).

$$\text{Total Asset Turnover} = \frac{\text{total operating revenue}}{\text{total assets}}$$

$$\text{Fixed Asset Turnover} = \frac{\text{total operating revenue}}{\text{net fixed assets}}$$

$$\text{Current Asset Turnover} = \frac{\text{total operating revenue}}{\text{current assets}}$$

These ratios measure the amount of operating revenue generated per dollar of total assets, fixed assets and current assets, respectively. High ratio values suggest greater generation of revenues from the existing asset base and are usually regarded as positive indicators of operating efficiency. National median levels of all three ratios among hospitals with fewer than 200 beds have increased since 1978 (see Exhibit XI-1), indicating an overall improvement in return on assets.

Specific components of current assets (such as inventory and accounts receivable) can also be incorporated into activity ratios in order to determine a facility's return on those particular assets:

$$\text{Inventory Turnover} = \frac{\text{total operating revenue}}{\text{inventory}}$$

$$\text{Receivables Turnover} = \frac{\text{total operating revenue}}{\text{accounts receivable}}$$

Among small hospitals, inventory turnover ratio values generally range from about 40-60 (with a median of 50), while receivable turnover ratio values range from 4 to 7 (with a median of 5.5). It is the responsibility of the loan officer to determine which of these ratios is most appropriate for a given facility. Those asset components which are unusually large or small in comparison with total operating revenues should be closely examined.

CONCLUSION

Ratio analysis can be an extremely valuable tool for evaluating the financial feasibility of a proposed capital project. It can provide a broad overview of the financial condition of an applicant facility by identifying past trends and relating them to current and forecasted conditions. These ratios can help to identify troublesome areas by uncovering symptoms of a weak financial structure. However, to ensure that financial ratios serve as reliable indicators of trends and changing relationships, the user must:

- Decide which ratios are most useful for a particular feasibility study
- Realize that a change in one ratio often causes a significant change in another ratio
- Examine and verify assumptions used to forecast financial statements
- Account for extraneous factors which can influence ratio values but are unrelated to financial performance. The most common factors are geographic location, size of the facility, types of services offered and form of ownership.

TABLE IX-1

COMPARATIVE NATIONAL VALUES FOR FINANCIAL RATIOS
(For Hospitals with fewer than 200 Beds)
1978 - 1981

Ratio	Range	1978	1979	1980	1981	Formula
Profitability						
Deductible	Lower (L)	.073	.080	.088	.097	Revenue Deductions / Gross Patient Service Revenues
	Median (M)	.109	.118	.124	.127	
	Upper (U)	.149	.158	.169	.172	
Markup	L	1.093	1.096	1.115	1.124	(Gross Patient Service Revenues + Other Operating Revenue) / Total Operating Revenue
	M	1.151	1.149	1.165	1.178	
	U	1.205	1.215	1.246	1.245	
Operating Margin	L	-.003	-.003	-.003	.000	(Total Operating Revenue - Operating Expenses) / Total Operating Revenue
	M	.021	.021	.020	.018	
	U	.043	.045	.045	.045	
Non-operating Revenue	L	.047	.026	.006	.091	Non-operating Revenue / Excess of Revenues over Expenses
	M	.273	.270	.361	.359	
	U	.665	.676	.770	.738	
Return on Total Assets	L	.008	.010	.014	.017	Excess of Revenues over Expenses / Total Assets
	M	.039	.041	.042	.049	
	U	.058	.070	.074	.073	
Return on Equity	L	.015	.020	.022	.029	Excess of Revenues over Expenses / Fund Balance
	M	.069	.076	.075	.079	
	U	.108	.124	.140	.139	
Liquidity						
Current Ratio	L	1.656	1.518	1.534	1.511	Current Assets / Current Liabilities
	M	2.086	1.987	1.913	1.910	
	U	3.031	2.781	2.583	2.648	
Quick Ratio	L	1.267	1.216	1.220	1.227	Quick Assets / Current Liabilities
	M	1.631	1.616	1.603	1.573	
	U	2.511	2.187	2.148	2.174	
Acid-Test Ratio	L	.095	.086	.072	.065	Cash & Marketable Securities / Current Liabilities
	M	.271	.250	.253	.213	
	U	.647	.636	.562	.536	

COMPARATIVE NATIONAL VALUES FOR FINANCIAL RATIOS
1978-1981 (For Hospitals with <200 Beds)
FmHA

Ratio	Range	1978	1979	1980	1981	Formula
Liquidity (Cont'd)						
Days In Patient Accounts Receivable	L	53.090	53.431	52.569	50.542	Net Patient Accounts Receivable / (Net Patient Service Revenue) / 365
	M	64.108	64.191	61.148	59.491	
	U	76.858	76.160	72.477	72.358	
Average Payment Period	L	37.421	39.300	38.320	39.640	Current Liabilities / (Operating Expenses - Depreciation - Amortization) / 365
	M	47.404	50.336	47.741	47.679	
	U	60.486	62.928	61.300	58.818	
Days Cash on Hand	L	4.933	4.160	4.180	3.654	Cash + Marketable Securities / (Operating Expenses - Depreciation - Amortization) / 365
	M	13.541	12.973	12.695	10.389	
	U	28.319	28.736	25.314	27.460	
Leverage						
Equity Financing Ratio	L	.414	.422	.382	.380	Fund Balance / Total Assets
	M	.582	.577	.577	.562	
	U	.716	.741	.715	.717	
Cash Flow to Total Debt	L	.097	.097	.100	.103	Excess of Revenues + Depreciation + Amortization Over Expenses / Current Liabilities + Long-Term Debt
	M	.181	.190	.196	.193	
	U	.345	.351	.345	.362	
Long-Term Debt to Equity	L	.117	.123	.123	.112	Long-Term Liabilities / Fund Balance
	M	.373	.374	.394	.463	
	U	1.034	1.045	1.303	1.256	
Times Interest Earned	L	1.546	1.475	1.573	1.764	Excess of Total Revenues Over Total Expenses / Interest Expense
	M	3.406	3.236	3.218	3.687	
	U	9.037	9.906	10.453	9.318	
Debt Service Coverage	L	1.611	1.818	1.857	2.057	Excess of revenues over expenses + interest expenses + Depreciation + Amortization / Principal Payment & Interest Expense
	M	2.762	3.076	3.032	3.296	
	U	6.919	6.256	5.849	6.610	
Debt Per Bed	This ratio could vary substantially from $75,000 to $110,000 per bed. Depending upon type of project and construction costs.					Total Debt / Total Number of Beds

COMPARATIVE NATIONAL VALUES FOR FINANCIAL RATIOS
1978-1981 (For Hospitals with <200 Beds)
FmHA

Ratio	Range	1978	1979	1980	1981	Formula
Activity						
Total Asset Turnover	L	.738	.737	.767	.781	Total Operating Revenue / Total Assets
	M	.989	1.009	1.085	1.086	
	U	1.284	1.360	1.412	1.419	
Fixed Asset Turnover	L	1.157	1.171	1.276	1.343	Total Operating Revenue / Net Fixed Assets
	M	1.552	1.676	1.928	1.989	
	U	2.379	2.383	2.593	2.642	
Current Asset Turnover	L	2.992	3.019	3.215	3.266	Total Operating Revenue / Current Assets
	M	3.687	3.860	3.903	3.982	
	U	4.511	4.495	4.767	4.969	
Inventory Turnover	L	32.682	33.309	35.078	37.061	Total Operating Revenue / Inventory
	M	43.392	42.666	46.532	49.699	
	U	57.033	59.411	65.196	67.480	

Source: The Hospital Industry Analysis Report - 1981, Hospital Financial Management Association Financial Analysis Service.

X. MANAGEMENT ANALYSIS

INTRODUCTION

The major purpose of this chapter is to summarize the most important subjective, qualitative considerations which should be part of every loan-making decision. Although some of them have already been mentioned in previous chapters, this one provides a more structured and thorough review of these variables and their role in determining project feasibility. The FmHA loan officer should use these subjective factors to supplement the quantitative data he has at his disposal. Just as a loan review would be incomplete without a thorough analysis of all pertinent quantitative information, it would be unsatisfatory to disregard inportant qualitative factors. These key management variables are discussed in the first section, and quantitative indicators of management performance are presented in the following section.

MANAGEMENT VARIABLES

A facility's management can be influenced by both external and internal variables. The external factors include the background and perspective of the institution's board of trustees, the facility's standing in the community, and the commitment of the medical staff to the institution's objectives and policies. Key internal factors include

outward indicators of managerial competence (such as years of experience in the health care administrative field) as well as measures of operating performance. In short, the management variables to be considered by the loan officer are those which indicate the adequacy of leadership and determine the overall orientation of the institution. The major external factors which influence the management of a facility are discussed below, followed by a review of the most significant internal variables.

External Factors

The financial success of any health care facility depends to a large extent on its standing with persons in the community who are apt to use its medical services and the physician population. The FmHA loan officer should be satisfied that the existing or proposed facility has a reputation for providing high quality care, operating efficiently and offering needed services. Widespread misperceptions and negative attitudes could result in skewed utilization and revenue forecasts.

Background of Trustees. The credibility of the board of trustees in the community as well as the reputation of individual board members is a major consideration. For an existing institution, the board's credibility may be reflected by the support of local citizens and their recognition that the facility is a positive asset to the community. In many communities the average citizen probably will not know the individual members of the hospital board of trustees, but he may have confidence in the institution based on his knowledge that the president of the local bank, the owner of the hardware store, an attorney, or cooperative director is a member of the board. Other facilities, such as nursing homes or community ambulatory clinics, may be governed by a family, a physician, or

by citizens of the community served by the facility and known to their neighbors.

For the FmHA loan officer to assess a trustee's standing in the community, it is necessary to be aware of: (1) his business background (2) his educational level (3) his experience on this or other health facility boards and (4) activities he has undertaken on behalf of the board. Resumes, minutes of board meetings and informal conversations with local residents are good sources of this kind of information.

Community Service. Related to community confidence in the facility's trustees is the community's perception about whether the facility provides needed health care services in an accessible and timely manner. Historical expansion of a facility's services is one indicator of its responsiveness to community needs. Another indicator is the number of public and private grants which have been awarded to the institution for funding proposed services.

Volunteer Activities. Another important indicator of community backing and support is the number of organizations and individuals conducting volunteer programs on behalf of the facility. The number of programs supported as well as the numbers of persons actually participating should be helpful to the FmHA loan officer. Volunteers include "candy stripers," women's auxiliaries, religious and fraternal organizations and individual community residents. Volunteer activities include such services as indirect patient care, operating the gift shop, assisting in the discharge department, conducting fund-raising benefits, manning telephone "hot-lines" and performing other outreach efforts.

Physician Attitude Toward Facility. Another key, and in many ways the most important variable in evaluating the potential feasibility of a capital expansion is whether the local medical community is supportive of the effort. In rural communities where there are few physicians, their support is crucial and, for this reason, this subject was discussed in detail in the chapter on demand forecasting (Chapter V).

Support is needed from both the physicians on staff who can directly control the level of utilization, as well as physicians who may refer their patients to the facility for ancillary service or treatment. Nursing homes are especially dependent on acceptance by referral physicians. This is one reason why many nursing homes are started by physicians who seek to gain some measure of control over facility utilization by including other physicians in their corporate structures. Free-standing clinics are less dependent on physician referrals but require passive acceptance by the community's practitioners if they are to succeed in penetrating the market.

Attractiveness of Living Areas. Closely related to physician acceptance, specifically for those on the staff of the facility, is the attractiveness of the local area as a place to live and raise a family. (This factor is of great importance because it also applies to administrative and other health care professionals.) Most professionals seek a market area where they can build up a practice (or gain management experience) while enjoying the amenities offered by the community. Because the acquisition and retention of the requisite number of physicians is critical to the financial success of a facility, the local area must be sufficiently attractive, from both a cultural and social standpoint.

Should this appeal be lacking, suitable latitude should be given for liberal leaves in order to permit physicians to seek these amenities elsewhere.

Facility Fund-Raising. Third-party payment can meet many of the financial needs of health care facilities. However, there are a number of expenses which are not reimbursed to the degree required by the facility or are not reimbursed at all, and charge paying patients (self-payors and those whose bills are paid by commercial insurers) can not always be counted on to make up the difference. Therefore, the facility must often rely on the community for some financial support if it is to provide the necessary scope of services. Although private funding of both public and non-profit facilities has significantly diminished over the past decade, fund-raising nevertheless remains a feasible method for securing private funds if done properly and aggressively. The success of fund-raising campaigns is therefore an indication of both trustees' fund-raising capabilities and community support. Although these factors are partly qualitative in nature, quantitative assessments must be made and incorporated into the facility's revenue statements.

Internal Factors

The quality of institutional management is governed by the personal attributes of its key administrators as well as by the external factors described above. Most of the day-to-day operations proceed without the direct involvement of the facility's governing board, giving the administrator and his staff ample opportunity to recommend and implement changes which can directly impact the financial status of the institution.

Management Quality and Experience. An experienced and knowledgeable management team is crucial to the success of any institution. The hospital administrator should have several years of experience in managing (or assisting with the management of) a similar-sized facility, preferably in a rural setting. Graduate education in hospital, health care or business administration gives some indication of the professional qualifications of the administrator and his staff. Certification should be held with the appropriate professional organizations such as the American College of Hospital Administrators, the Healthcare Financial Management Association, the American College of Nursing Home Administrators and the American Association of Medical Clinics.

Institutional Accreditations and Affiliations. Closely aligned with the professional certifications and experience of management are the accreditations and affiliations of the facility. Concerning accreditation of hospitals, the most widely used sytem is administered by the Joint Commission on Accreditation of Hospitals (JCAH). For osteopathic hospitals the corresponding organization is the American Osteopathic Association (AOA). The Accreditation Association for Ambulatory Health Care (AAAHC) certifies ambulatory clinics, as does JCAH. Although AAAHC currently evaluates over 200 ambulatory facilities throughout the nation, participation in the program is strictly optional. Teams representing such associations periodically inspect participating institutions to determine the extent to which they meet standards established by the respective associations. Non-accreditation or disaccreditation can result in loss of a facility's eligibility for Medicare and Medicaid funds.

There are no formal accrediting organizations for nursing homes although the American Association of Homes for the Aged and the American

Health Care Association encourage members to adhere to certain practices. JCAH is involved with accreditation of skilled nursing facilities, but only those facilities which voluntarily submit to evaluation. Lack of JCAH accreditation in no way compromises the facility's ability to receive Medicare and Medicaid reimbursement. The Reagan administration discourages adoption of formal accreditation procedures for nursing homes, indicating that these facilities may be primarily self-regulating in the near future.

Another source of certification is the state Medicaid agencies. In order to be eligible to provide services and receive Medicaid reimbursement, a provider must meet certain public health department and fire safety standards. At a minimum, an existing institution should meet these standards, and a prospective facility should be designed to meet them.

The affiliations which a facility has with other medical care institutions is also a significant indicator of management's willingness and ability to achieve economies of operation and better quality of care. Nursing homes and ambulatory clinics may be affiliated with hospitals, and hospitals may be associated with other hospitals or medical schools. Such affiliations can enhance the flow of patients and revenue, improve access to medical and nursing staffs and provide cost savings through shared services.

Staff Performance and Morale. Another key indicator of administrative performance is the way in which management handles its non-physician personnel issues. Performance measures, mostly quantitative, should be examined, compared to those of similar competitive facilities, and incorporated into the institution's personnel forecasts. Staff

turnover is a qualitative as well as a quantitative variable which warrants close scrutiny by the loan officer. The turnover rate is extremely useful in the evaluation of employee satisfaction as well as confidence in management's leadership. Due to the large concentration of women, particularly younger women, in the nursing and clerical staffs, turnover rates in the health care industry are likely to be higher than in other service industries. However, the turnover in rural health care facilities is generally lower than in urban facilities because there are fewer competitors to whom a dissatisfied employee may turn. It is the loan officer's responsibility to identify unusually high turnover rates (in excess of eight to ten percent) and assess the factors which may be causing them.

A common reason for a high rate of turnover is the lack of salary competitiveness with rival facilities or related service industry positions. Verification should be made with the personnel directors or administrators of similar health facilities in the area concerning the adequacy of salaries. Discussions between the FmHA loan officer and the applicant should also reveal any other personnel issues such as absenteeism or unionization. In any case, the loan officer should be satisfied that all problems related to personnel are being addressed satisfactorily.

Technological Advances. The FmHA loan officer should explore the degree to which the health facility has and is maintaining its quality of service by taking advantage of recent technological advances in the medical field. Discussions with the admininstration and key medical staff should reveal whether the facility has acquired either insufficient or excessive new equipment. Another source of information about application of new technologies is the local Health Systems Agency.

Also, it is important that the medical staff view the institution as a provider of all of the basic technological equipment necessary to practice high quality medicine and as a prospective employer of new technology which would further enhance their capabilities. If the physicians are not convinced this is the case, and there is an alternate facility where they can practice, the utilization and revenues of the applicant facility may suffer accordingly.

Utilization Review. As private and public third party payors become increasingly focused on institutional cost containment, there will be increased pressure on hospitals to reduce admissions, institutional services and lengths of stay when there are alternative facilities which can accommodate these patients at a lower, less expensive level of care.

The FmHA loan officer should be aware that, although the current PSRO program has been terminated by TEFRA, it did not eliminate the requirements for utilization and peer review. The government's intent is to establish a new system of Peer Review Organizations (PRO) in order to consolidate review activities over broader geographic areas, thereby increasing efficiency and lowering cost. However, because the existing PSRO program will not be phased out until 1985, the loan officer should know whether the applicant institution has been delegated review functions by the PSRO and what measures management has taken (or plans to take) in order to offset any revenue losses which might result from utilization review activities.

Reimbursement, Accounting and Billing System. The FmHA loan officer should be keenly aware of the way in which the applicant facility manages its current revenues. A large percentage of most health

care facilities' current assets is in accounts receivable due to the fact that over 90 percent of inpatient care is reimbursed by third parties. A well managed short-term care facility might have 10 percent of its total assets and 55 - 90 percent of its current assets in accounts receivable.

In addition to knowing how much of the applicant's current assets are in accounts receivable, the loan officer should be aware of the normal level of bad debts which the facility experiences and the ways in which management attempts to reduce bad debts. If an applicant has been lax in its billing and collection procedures, the officer should take this into account when determining the feasibility of the proposed project.

Third, the extent to which the applicant has borrowed funds in order to meet current liabilities may be a reflection on managerial financial control. Routine borrowing due to insufficient cash flows and working capital suggests that the facility is not capable of undertaking a capital expansion.

Fourth, the loan officer should determine whether the applicant has made any attempt to modify its rate structure and cost finding procedures in order to maximize third party reimbursement. If any efforts have been made, their effects should be analyzed.

Finally, the loan officer should determine whether management is currently implementing, or plans to implement, cost-containment procedures. This is an extremely important consideration in view of the trend toward prospective reimbursement.

Clearly, handling the complex accounting issues normally faced by health care institutions, being aggressive in fee collection and exhibiting creativity in cost finding, rate setting and cost containment are capabilities which should be satisfactorily displayed to the loan officer before any loan is approved.

Third-Party and Vendor Assessments. A useful way to obtain insight into management's ability to operate efficiently and effectively is to discuss its business relationships with third-party payors and vendors. Concerning accounts receivable, the validity of claims and promptness of claims filings can be readily determined from third-party payors or fiscal intermediaries. It is particularly important for the loan officer to inquire about the accuracy and completeness of the claims information submitted, since claims are not accepted for processing and payment until the information is accurate and complete. An estimate of the percentage and dollar volumes of returned claims would be helpful. Also, in the case of a hospital, it should be determined if the applicant is taking advantage of the Periodic Interim Payment (PIP) system under Medicare (PIP payments are fixed payments made bi-weekly throughout the year based on historical costs. The difference between the actual claims accepted and the bi-weekly amounts paid is resolved at the end of each fiscal year.) The FmHA loan officer should be aware of any unresolved settlements and their financial implications for the applicant.

Concerning accounts payable, the major vendors associated with the applicant facility should be consulted in order to determine the kinds of business relationships they have maintained with the institution. For example, the practice of seeking competitive bids for large procurements and the ability to consistently take advantage of vendor discounts indicate a significant managerial ability to capitalize on advantageous situations. Discussions with vendors may reveal whether, how frequently, and for how long an applicant has fallen behind in its payments.

MANAGEMENT PERFORMANCE INDICATORS

In addition to the qualitative factors discussed in the previous section, there are also a number of useful quantitative measures of management efficiency. Since the introduction of prospective reimbursement to the health care industry, greater emphasis has been placed on identifying meaningful performance indicators for all types of health care entities. Utilization measures, such as numbers of admissions, length of stay and number of procedures performed have traditionally been used as indicators of effectiveness. However, measures of efficiency have been used increasingly during the past few years due to rapidly rising health care costs and decreasing reimbursement. Following is a list and discussion of useful performance indicators for each of the three major types of health care facilities (hospitals, nursing homes and ambulatory clinics).

Hospital Performance Indicators

The efficiency indicators for hospitals (shown in Exhibits X-1 to X-4) were extracted from Monitrend: Six-Month National Data Book published by the Hospital Administrative Services of the American Hospital Association in Chicago for the period ending on June 30, 1982. This information is collected periodically for general short-term hospitals by bed size and U.S. Census Divisions. Statistics for the following bed size groups and census regions are included in this chapter:

Bed Size Groups 1/

- Under 50 beds
- 50-99 beds
- 100-199 beds

Census Divisions

1. New England
   - Connecticut
   - Maine
   - Massachusetts
   - New Hampshire
   - Rhode Island
   - Vermont

2. Middle Atlantic
   - New Jersey
   - New York
   - Pennsylvania

3. South Atlantic
   - Delaware
   - District of Columbia
   - Florida
   - Maryland
   - North Carolina
   - South Carolina
   - Virginia
   - West Virginia

4. East North Central
   - Illinois
   - Indiana
   - Michigan
   - Ohio
   - Wisconsin

5. East South Central
   - Alabama
   - Kentucky
   - Mississippi
   - Tennessee

6. West North Central
   - Iowa
   - Kansas
   - Minnesota
   - Missouri
   - Nebraska
   - North Dakota
   - South Dakota

7. West South Central
   - Arkansas
   - Louisiana
   - Oklahoma
   - Texas

8. Mountain
   - Arizona
   - Colorado
   - Idaho
   - Montana
   - Nevada
   - New Mexico
   - Utah
   - Wyoming

9. Pacific
   - Alaska
   - California
   - Hawaii
   - Oregon
   - Washington

The data included in these tables was gathered from 1091 institutions voluntarily participating in the program, and is therefore not fully representative of either the entire hospital industry or a particular facility. Since all hospitals, rural and urban, are combined for a particular bed size category or census division, it is not possible to

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1/ Data for hospitals with more than 200 beds are excluded because approximately 99% of rural hospitals which seek financial assistance from FmHA have fewer than 200 beds.

specifically identify the performance characteristics of rural institutions. However, because the small hospitals tend to be located in rural areas, it may be presumed that the smaller the bed size category the more likely it is to reflect the operations of rural hospitals.

The FmHA loan officer should keep in mind that expenses and intensity of staffing may vary among institutions according to such factors as type of services offered, case-mix intensity, teaching affiliations and differences in cost of living. Therefore, these tables should be used only as a general guideline. When the statistics are compared with the facility's historical and forecasted data, they can be used (along with other guidelines discussed in this manual) to assess a health care facility loan application.

Nursing Home Indicators

The performance indicators for nursing homes were obtained from the 1977 National Nursing Home Survey conducted by the National Center for Health Statistics (HHS). The survey sample included 2000 nursing homes out of a nationwide total of 18,900 long-term care facilities. Bed size categories used in the survey were:

- less than 50 beds
- 50-99 beds
- 100-199 beds
- 200 beds or more.

Nursing homes were classified into four geographical regions which are combinations of those used by the U.S. Census Bureau (see previous section on Hospital Indicators):

Region	U.S. Census Division
Northeast	New England
	Middle Atlantic

North Central	East North Central West North Central
South	South Atlantic East South Central West South Central
West	Mountain Pacific

With respect to ownership, nursing homes are categorized as:

- proprietary
- non-profit voluntary
- non-profit government controlled.

Exhibit X-5 lists nursing home operating indicators by facility bed size. Exhibit X-6 shows operating indicators by geographical region and type of ownership. Each exhibit includes both staffing and cost indicators. With regard to staffing, a full-time employee is an individual who works 40 hours per week or 173 hours per month. A full-time equivalent (FTE) can be comprised of either a full-time employee or several part-time employees whose hours add up to a full-time work week.

The cost data were collected according to the following major components:

- Labor costs-wages and fringe benefits for all employees
- Fixed costs-equipment, building and land rentals, insurance taxes, licenses, interest, financing and depreciation charges, and amortization of lease-hold improvements
- Operating costs-expenses for food, drugs, supplies, equipment, laundry, linen, utilities, buildings and ground maintenance, and contractual arrangements for laboratory, professional, and household services
- Miscellaneous costs-dues, subscriptions, travel, advertising, and other expenses.

Excluded from costs are any losses sustained in the sale or disposition of fixed assets and other extraordinary losses or costs not related to the current cost of providing health care.

Again, the FmHA loan officer should use these indicators only as guidelines in order to gain some appreciation of the resources required by various sizes and types of facilities. In addition, he/she should realize that local conditions such as strict licensing requirements and high construction costs can cause significant variations in resource requirements among regions and even within geographical regions.

Ambulatory Clinic Indicators

There is relatively little published information concerning the operating efficiency of ambulatory care centers, as managers of these facilities have only recently begun to collect the required statistics. The performance indicators for ambulatory care centers and their associated values (shown in Exhibits X-7 and X-8) were obtained from MONITREND: Six-Month National Data Book, published by the American Hospital Association for the period ending on June 30, 1982. Exhibit X-7 includes a list of operating indicators and their respective median values for outpatient clinics. Exhibit X-8 includes similar information for emergency departments of short-term hospitals.

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HOSPITAL PERFORMANCE INDICATORS
TABLE X-1

HOSPITAL PERFORMANCE INDICATORS
BY U.S. CENSUS REGION
FOR HOSPITALS WITH LESS THAN 50 BEDS

	CENSUS DIVISION								
PERFORMANCE INDICATOR	1	2	3	4	5	6	7	8	9
Cost Per Adjusted Patient Day 1/	302.35	191.26	233.01	251.21	190.33	218.70	227.40	295.33	352.72
Cost Per Adjusted Discharge 2/	1,822.61	1,321.10	1,283.09	1,478.31	1,046.83	1,355.66	1,185.82	1,377.75	1,457.72
Days of Revenue In Accounts Receivable	57.45	55.47	73.25	64.48	68.77	60.06	81.31	77.37	75.97
Nursing Unit Direct Expense Per Patient Day	69.17	45.79	40.33	56.97	43.19	51.92	51.02	67.46	77.23
Nursing Man-Hours Per Patient Day	9.11	7.61	7.53	8.27	7.26	8.30	7.87	9.26	8.98
FTEs Per Adjusted Occupied Bed 3/	3.32	3.04	3.02	3.25	2.54	3.09	3.10	3.36	3.65
Emergency Service Man-Hours Per Visit	1.68	1.29	0.94	1.38	0.81	0.82	1.01	1.02	1.53
Laboratory Tests Per Adjusted Patient Day 1/	44.40	39.49	30.23	44.38	27.84	42.09	44.09	54.79	51.73
Plant Engineering Direct Expense Per 1000 Square Feet	153.84	155.97	184.97	249.53	158.44	145.44	195.31	189.49	208.69
Housekeeping Direct Expense Per 1000 Square Feet	232.26	283.49	212.43	174.97	208.41	158.48	214.61	194.12	179.70
Depreciation, Lease & Rent Expense % of Total Expense	3.82	4.16	4.40	4.45	5.25	4.54	3.71	4.88	3.56
Square Feet Per Bed (Housekeeping)	687.29	814.50	689.13	676.19	682.69	630.52	514.82	647.40	608.70

NOTE 1--Adjusted patient days = $\frac{\text{Total Patient Days}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

NOTE 2--Adjusted Discharges = $\frac{\text{Total Discharges}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

NOTE 3--Adjusted Occupied Bed = $\frac{\text{Total Occupied Beds}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

SOURCE--MONITREND: Six-Month National Data Book, Hospital Administrative Services, American Hospital Association for period ending on June 30, 1982.

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HOSPITAL PERFORMANCE INDICATORS
TABLE X-2

HOSPITAL PERFORMANCE INDICATORS
BY U.S. CENSUS REGION
FOR HOSPITALS WITH 50-99 BEDS

	CENSUS DIVISION								
PERFORMANCE INDICATOR	1	2	3	4	5	6	7	8	9
Cost Per Adjusted Patient Day 1/	279.72	198.88	222.55	252.99	212.43	244.53	242.59	324.85	397.08
Cost Per Adjusted Discharge 2/	1,766.57	1,433.91	1,411.39	1,553.73	1,257.06	1,502.54	1,380.18	1,661.60	2,072.96
Days of Revenue In Accounts Receivable	56.62	60.84	68.91	59.20	72.57	59.50	77.54	78.36	68.65
Nursing Unit Direct Expense Per Patient Day	61.65	50.88	45.60	57.08	45.31	58.10	54.41	68.35	84.53
Nursing Man-Hours Per Patient Day	8.40	6.85	7.43	8.08	7.10	8.10	7.82	8.39	8.52
FTEs Per Adjusted Occupied Bed 3/	3.44	2.68	2.93	3.21	2.70	3.19	3.11	3.61	3.88
Emergency Service Man-Hours Per Visit	1.54	1.68	1.54	1.91	1.63	1.39	1.53	1.84	1.87
Laboratory Tests Per Adjusted Patient Day 1/	43.98	37.21	36.58	42.40	40.45	39.23	36.32	50.39	50.00
Plant Engineering Direct Expense Per 1000 Square Feet	203.36	1185.59	158.94	184.62	181.09	1[illegible]1.55	181.44	191.23	241.88
Housekeeping Direct Expense Per 1000 Square Feet	242.16	215.51	221.15	188.45	232.31	198.97	232.33	219.18	260.76
Depreciation, Lease & Rent Expense % of Total Expense	4.42	3.67	4.25	4.53	3.53	4.89	3.93	4.68	4.13
Square Feet Per Bed (Housekeeping)	773.81	753.22	684.08	736.05	625.66	655.85	613.10	838.70	676.10

NOTE 1--Adjusted patient days = $\frac{\text{Total Patient Days}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

NOTE 2--Adjusted Discharges = $\frac{\text{Total Discharges}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

NOTE 3--Adjusted Occupied Bed = $\frac{\text{Total Occupied Beds}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

SOURCE--MONITREND: Six-Month National Data Book, Hospital Administrative Services, American Hospital Association for period ending on June 30, 1982.

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HOSPITAL PERFORMANCE INDICATORS
TABLE X-3

HOSPITAL PERFORMANCE INDICATORS BY U.S. CENSUS REGION FOR HOSPITALS WITH 100-199 BEDS

PERFORMANCE INDICATOR	CENSUS DIVISION 1	2	3	4	5	6	7	8	9
Cost Per Adjusted Patient Day 1/	261.86	236.55	245.07	275.86	223.42	281.67	272.48	327.12	397.99
Cost Per Adjusted Discharge 2/	2,073.52	1,830.54	1,611.15	1,759.76	1,320.54	1,777.05	1,600.07	1,700.51	2,339.04
Days of Revenue in Accounts Receivable	56.38	56.47	64.02	57.29	71.16	57.83	72.10	66.10	60.97
Nursing Unit Direct Expense Per Patient Day	58.70	52.86	51.94	58.35	45.19	61.99	57.23	70.98	80.49
Nursing Man-Hours Per Patient Day	7.32	6.93	7.32	7.37	6.78	8.17	7.76	8.09	8.16
FTEs Per Adjusted Occupied Bed 3/	3.09	2.86	3.06	3.16	2.99	3.27	3.29	3.55	3.74
Emergency Service Man-Hours Per Visit	1.71	1.74	1.86	2.29	1.95	1.96	2.14	2.14	1.76
Laboratory Tests Per Adjusted Patient Day 1/	37.44	39.52	39.35	42.16	42.22	40.86	37.29	54.04	51.68
Plant Engineering Direct Expense Per 1000 Square Feet	270.18	1227.47	203.41	217.97	183.42	182.73	197.94	245.79	301.90
Housekeeping Direct Expense Per 1000 Square Feet	250.06	244.61	230.58	228.24	254.07	220.33	233.54	265.59	299.17
Depreciation, Lease & Rent Expense % of Total Expense	4.05	4.52	5.04	5.21	4.36	5.23	4.03	5.55	4.75
Square Feet Per Bed (Housekeeping)	783.89	750.77	639.08	767.28	654.83	786.40	718.70	863.23	775.16

NOTE 1--Adjusted patient days = $\frac{\text{Total Patient Days}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

NOTE 2--Adjusted Discharges = $\frac{\text{Total Discharges}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

NOTE 3--Adjusted Occupied Bed = $\frac{\text{Total Occupied Beds}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$

SOURCE--MONITREND: Six-Month National Data Book, Hospital Administrative Services, American Hospital Association for period ending on June 30, 1982.

EXHIBIT X-4

HOSPITAL ADMINISTRATIVE SERVICES PERFORMANCE INDICATORS AND FORMULAE 1/

Cost per Adjusted Patient Day 2/	(Inpatient revenue ÷ Total patient revenue) x Total reported expense ÷ (OB + M & S 3/ patient days).
Cost per Adjusted Discharge 2/	(Inpatient revenue ÷ Total patient revenue) x Total; reported expense) ÷ (OB + M & S adjusted discharges).
Days of Revenue in Patient Accounts Receivable	Total patient accounts receivable ÷ (Total gross patient revcenue ÷ Days in period).
Nursing Units Direct Expense per Patient Days	All nursing units direct expense ÷ (OB + M & S patient days). 4/
Nursing Man-Hours per Patient Day	All nursing units man-hours ÷ (OB + M & S patient days). 4/
Full-Time Employees per 5/ Adjusted Occupied Bed	(Total employee man-hours ÷ 173 hours) ÷ (OB + M & S adjusted occupied beds).
Emergency Service Man-Hours per Visit	Emergency service man-hours ÷ Emergency service visits.
Laboratory Tests per Adjusted Patient Day	(Total undweighed procedures ÷ Controls & standards) ÷ Adjusted Patient Days.
Plant Engineering Direct Expense per 1000 Sq. Ft.	Plant engineering direct expense ÷ (Plant square feet ÷ 1,000).
Housekeeping Direct Expense per 1000 Sq. Ft.	Housekeeping direct expense ÷ (Housekeeping square feet ÷ 1,000).
Depreciation, Lease & Rent Expense; % of Total Expenses	Depreciation, lease and rent expense ÷ total expenses.
Square Feet per Bed (Housekeeping)	Housekeeping square feet ÷ (OB + M & S beds).

1/ Several of the formulae include "adjusted" statistics. The following formulae were used in order to discount outpatient activity:

$$\text{Adjusted patient days} = \frac{\text{Total Patient Days}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$$

$$\text{Adjusted Discharges} = \frac{\text{Total Discharges}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$$

$$\text{Adjusted Occupied Bed} = \frac{\text{Total Occupied Beds}}{\frac{\text{Total Inpatient Revenue}}{\text{Total Operating Revenue}}}$$

2/ Ratio of inpatient charges to total charges as applied to total costs is used, assuming a reasonable relationship exists between charges for services and the cost of providing those services.

3/ Obstetrical and Medical & Surgical.

4/ "All nursing units" include obstetrical suite, nursery, intensive care, medical and surgical units, and nursing administration.

5/ A full-time employee is equivalent to one person paid for one month based on a 40-hour week or 173 hours per month.

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EXHIBIT X-5

NURSING HOME PERFORMANCE INDICATORS BY
FACILITY BED SIZE

	LESS THAN 50 BEDS		50-99 BEDS		100-100 BEDS		200 BEDS OR MORE		ALL FACILITIES	
	NUMBER	% 1/	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
Averaga Total FTE Employees 2/ per 100 Beds	45.6	100.0%	48.7	100.0%	46.6	100.0%	41.5	100.0%	46.2	100.0%
Nursing 3/	37.3	81.8	43.3	88.9	42.5	91.2	37.6	90.6	41.1	89.0
Administrative, Medical & Therapeutic	8.3	18.2	5.4	11.1	4.2	9.0	3.9	9.4	5.0	10.8
Averaga Total Costs per Resident Day	$ 17.91	100.0%	$ 22.56	100.0%	$ 23.92	100.0%	$ 30.41	100.0%	$ 23.84	100.0%
Labor	10.34	57.7	13.36	59.2	13.89	58.1	19.42	63.9	14.23	60.0
Operating	4.45	24.8	4.87	21.6	5.09	21.3	6.22	20.5	5.14	21.6
Fixed	2.20	12.3	3.29	14.6	3.77	15.8	3.71	12.2	3.40	14.3
Miscellaneous	.92	5.1	1.04	4.6	1.17	4.9	1.06	3.5	1.08	4.5

NOTE 1: Totals may not add up to 100% due to rounding.
NOTE 2: FTE (full-time equivalant employees), includes only employees providing direct health-related services to residents.
NOTE 3: Includes registered nurses, licensed practical nurses and nurses' aides.

SOURCE: The National Nursing Home Survey, 1977 Summary for tha United States, National Center for Health Statistics, DHHS.

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EXHIBIT X-6

NURSING HOME PERFORMANCE INDICATORS BY:

	GEOGRAPHIC REGION								TYPE OF OWNERSHIP					
	NORTHEAST		NORTH CENTRAL		SOUTH		WEST		PROPRIETARY		VOLUNTARY NON-PROFIT		GOVERNMENT	
	NUMBER	% 1/	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
Average Total FTE Employees 2/ per 100 Beds	51.4	100.0%	46.8	100.0%	42.6	100.0%	43.4	100.0%	43.4	100.0%	53.7	100.0%	49.7	100.0%
Nursing 3/	45.3	88.1	42.1	90.0	38.4	90.1	37.8	87.1	38.8	89.4	47.2	87.9	44.6	89.7
Administrative, Medical & Therapeutic	6.1	11.9	4.7	10.0	4.2	9.9	5.6	12.9	4.6	10.6	6.5	12.1	5.1	10.3
Average Total Costs per Resident Day	$ 34.34	100.0%	$ 21.59	100.0%	$ 18.91	100.0%	$ 21.79	100.0%	$ 21.97	100.0%	$27.57	100.0%	$ 29.54	100.0%
Labor	20.72	60.3	13.18	61.0	11.00	58.2	12.49	57.3	12.46	56.7	16.93	61.4	21.33	72.2
Nursing 4/	NA 5/		N/A		N/A		N/A							
Operating	7.36	21.4	4.50	20.8	4.36	23.1	4.62	21.2	4.65	21.3	6.49	23.5	5.80	19.6
Fixed	4.97	14.5	2.94	13.6	2.58	13.6	3.49	16.0	3.76	17.1	3.03	11.0	1.49	5.0
Miscellaneous	1.29	3.8	.97	4.5	.97	5.1	1.18	5.4	1.09	5.0	1.11	4.0	.92	3.1

NOTE 1: Totals may not add up to 100% due to rounding.
NOTE 2: FTE (full-time equivalent employees), includes only employees providing direct health-related services to residents.
NOTE 3: Includes registered nurses, licensed practical nurses and nurses' aides.
NOTE 4: Included in labor.
NOTE 5: Not available.

SOURCE: The National Nursing Home Survey, 1977 Summary for the United States, National Center for Health Statistics, DHHS.

EXHIBIT X-7

OUTPATIENT CLINIC
PERFORMANCE INDICATORS

PERFORMANCE INDICATOR	MEDIAN VALUE
Visits Per Month	1,185.00 visits
Direct Expense Per Visit	$27.13
Indirect Expense Per Visit	$22.37
Nonphysician Expense per Visit	$24.94
Physician Expense Per Visit	$23.84
Resident Expense Per Visit	$ 3.61
Physician Manhours Per 100 Visits	53.24 manhours
Percent Resident Manhours	80.94 manhours
Nonphysician Manhours Per 100 Visits	192.48 manhours
Nursing Manhours Per 100 Visits	92.65 manhours
Percent R N Manhours	72.97 manhours
Percent L P N Manhours	22.96 manhours
Administrative and Clerical Manhours Per 100 Visits	64.08 manhours
Percent Inpatients From Clinic	2.24 percent
Clinic Square Feet Per Visit	4.63 square feet
Visits Per Examination Room	84.27 visits
EKG Examinations Per 100 Visits	1.96 examinations
Diagnostic Radiology Procedures Per 100 Visits	6.41 procedures

SOURCE: MONITREND: Six-Month National Data Book, Hospital Administrative Services, American Hospital Association for period ending on June 30, 1982.

EXHIBIT X-8

EMERGENCY DEPARTMENT
PERFORMANCE INDICATORS

PERFORMANCE INDICATOR	MEDIAN VALUE
Visits Per Month	2,229.00 visits
Direct Expense Per Visit	$38.31
Indirect Expense Per Visit	$21.93
Nonphysician Expense per Visit	$26.24
Physician Expense Per Visit	$19.33
Resident Expense Per Visit	$ 1.79
Physician Expense-Percent of Total	$44.38
Physician Manhours Per 100 Visits	43.43 manhours
Resident Manhours Per 100 Visits	11.06 manhours
Nursing Manhours Per 100 Visits	175.64 manhours
Percent RN Manhours	57.64 manhours
Percent LPN Manhours	17.06 manhours
Percent EMT Manhours	18.66 manhours
Administrative and Clerical Manhours Per 100 Visits	59.53 manhours
Percent E.R. Patients Admitted as Inpatients	16.49 percent
Percent Inpatients From E.R.	30.57 percent
E.R. Square Feet Per 100 Visits	289.94 square feet
Visits Per Examination Room	166.40 visits
Respiratory Services Per 100 Visits	2.76 services
Laboratory Tests Per Visit	6.88 tests
EKG Examinations Per 100 Visits	5.59 examinations
Diagnostic Radiology Procedures Per 100 Visits	49.58 procedures

SOURCE: MONITREND: Six-Month National Data Book, Hospital Administrative Services, American Hospital Association for period ending on June 30, 1982.

XI. FINANCIAL FEASIBILITY CHECKLISTS

The following pages contain checklists which the FmHA loan officer can use for reviewing loan applications from rural hospitals, nursing homes, and ambulatory clinics. Each checklist includes the key indicators discussed in the previous ten chapters. These indicators are grouped according to the way they were presented in the manual to facilitate recall of the narrative in the appropriate chapter.

Each checklist is self-contained and can be duplicated by the FmHA loan officer to provide a working tool onto which the factors considered and the applicant's quantitative information can be entered. Sequential review of the loan application using the appropriate checklist should provide the FmHA loan officer with a clear understanding of the financial feasibility of the proposed project and the need for FmHA financing. The checklists are numbered as follows to facilitate their reproduction:

- Hospital Loan Feasibility Checklist - H-1 to H-11
- Nursing Home Loan Feasibility Checklist - N-1 to N-8
- Ambulatory Clinic Loan Feasibility Checklist - A-1 to A-8.

HOSPITAL LOAN FEASIBILITY CHECKLIST

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Project Description				
1. Identifying information	N/A	N/A	___	___
2. Type of ownership (public, nonprofit, etc.)	N/A	___	___	___
3. Form of ownership (sole proprietorship, partnership, or corporation)	N/A	___	___	___
4. Type of construction or service proposed (new, replacement, expansion, or renovation)	N/A	___	___	___
5. Size of expansion (square feet)	N/A	___	___	___
6. Certificate of need (or 1122) approval (if applicable)	N/A	N/A	___	___
7. Estimated construction costs	N/A	___	___	___
8. Estimated increase in service capacity (number of beds, ambulatory visits, etc.)	N/A	___	___	___
9. Estimated cost escalation per month to bid date	N/A	___	___	___
10. Pro forma financial statement obtained	N/A	N/A	___	___
11. Narrative support from certificate of need (if applicable)	N/A	N/A	___	___
12. Facility ownership of 5% or greater disclosed	N/A	N/A	___	___
Assessment of Demand				
1. Primary service area correctly defined	51% or more	___	___	___
2. Independent demand and feasibility studies done for new facility or service	N/A	N/A	___	___
3. Effects on existing facilities considered	N/A	N/A	___	___
4. Commitment of necessary physicians				
--List of physicians by name, age, specialty, and annual admissions for past 3-5 years	N/A	N/A	___	___
--Change in physician composition since feasibility study	N/A	N/A	___	___
5. Large scale inmigration forecast	N/A	N/A	___	___
6. Large scale outmigration forecast	N/A	N/A	___	___
7. Service area population growth trends	N/A	___	___	___
8. Service area birth rate per thousand	12.5-15.0	___	___	___
9. Trends in percent of population over 65	N/A	___	___	___
10. Hospital beds per 1,000 pop. in service area	3.8-4.2	___	___	___
11. Service area hospital occupancy rate	70-90%	___	___	___
12. Average hospital length of stay in serv. area	6.0-8.0	___	___	___
13. Lab. tests performed per admis. by bed size	16-39	___	___	___
14. Operating room procedures per 100 medical surgical admissions by bed size	24-61	___	___	___
15. Radiological proc. per admis. by bed size	1.5-2.0	___	___	___
16. Significant increases in admis. & lengths of stay adequately justified	N/A	N/A	___	___
17. Significant increases in other services adequately justified	N/A	N/A	___	___
18. Hospital demand anal. sheet completed (p. H-2)	N/A	N/A	___	___

*If appropriate

HOSPITAL DEMAND ANALYSIS SHEET

Number	Source Item	Source	Amount		If Value Outside Range See Page:
A	Occupancy rate (%)	Applicant	____	60% - 90%	XI-9
B	Bed size	Applicant	____		
C	Average length of stay	Applicant	____	6.0 - 8.0	XI-9, 10
D	Operating room procedures	Applicant	____		
E	Laboratory tests	Applicant	____		
F	Radiology procedures	Applicant	____		
G	Total FTE employees	Applicant	____		
H	Management FTE employees	Applicant	____		
I	Physicians on med. staff	Applicant	____		
J	Service area population	Feas. study	____		
K	Physicians practicing in Service Area (SA)	Feas. study	____		
L	SA beds	Col. F, p. XI-4	____		
M	SA patient days	Col. G, p. XI-4			

	Analytical Item	Calculation	Amount		
N	Average Daily Census	A x B	____		
O	Patient Days	N x 365	____		
P	Admissions	O ÷ C	____		
Q	Market share	O ÷ M	____		
R	Supply share	B ÷ L	____		
S	Delivery share	Q ÷ R	____	0.9 - 1.2	XI-11
T	Admissions per physician	P ÷ I	____	100 - 250	XI-11
U	O.R. procedures per admission	D ÷ P	____	0.3 - 0.6	XI-11
V	Lab tests per admission	E ÷ P	____	10 - 40	XI-11
W	Radiology proc. per admission	F ÷ P	____	1 - 3	XI-11
X	FTE per occupied bed	G ÷ N	____	2.5 - 4.0	XI-12
Y	Beds per administrative FTE	B ÷ H	____	35 - 45	XI-12
Z	Service area use rate	M ÷ J	____	950 - 1250	XI-10
A1	Physicians per 1,000 SA population	K ÷ J	____	1 - 3.5	

SERVICE AREA ANALYSIS SHEET

	A	B	C	D	E	F	G
	Facility	Bed Size	Occupancy Rate	Travel Time (from applic- ant city)	Competition Factor = 120 Min.- Col. D / 120 Min.	Competitive Beds ExB	Service Area Patient Days FxCx365
1	_____	____	____%	__0__ min.	1.00	_____	_____
2	_____	____	____%	____ min.	_____	_____	_____
3	_____	____	____%	____ min.	_____	_____	_____
4	_____	____	____%	____ min.	_____	_____	_____
5	_____	____	____%	____ min.	_____	_____	_____
6	_____	____	____%	____ min.	_____	_____	_____
7	_____	____	____%	____ min.	_____	_____	_____
8	_____	____	____%	____ min.	_____	_____	_____
9	_____	____	____%	____ min.	_____	_____	_____
10	_____	____	____%	____ min.	_____	_____	_____
TOTAL						_____ (carry to line L, page XI-3)	_____ (carry to line M, page XI-3)

HOSPITAL LOAN FEASIBILITY CHECKLIST (Cont.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Revenue Forecast				
1. Third-party payment as percent of net revenues	85-90%			
2. Subject to State rate review	N/A	N/A		
3. Historical 3-5 year in-patient routine revenue per day	N/A			
4. Annual forecasted increase in per diem charges	5-7%			
5. Unresolved third-party settlement amounts	N/A	N/A		
6. Change in patient mix among third-party payors considered	N/A	N/A		
7. Exceed rates of competitive facilities	N/A	N/A		
8. Do recognized third-party costs exceed charges	N/A	N/A		
9. Deductions as percent of gross patient service revenue	N/A	N/A		
10. Other operating revenue as percent of net patient revenue	N/A			
11. Non-operating revenue as percent of net patient revenue	N/A			
12. Substantial forecasted revenue from gifts, endowments, pledges, and grants justified	N/A			
13. Amount of non-operating funds (unrestricted)	N/A	N/A		
14. Revenue forecast assumptions known	N/A	N/A		
15. Case-mix known by DRG	N/A	N/A		
16. Costs known by DRG	N/A	N/A		
Operating Expenses and Debt Service Forecast				
1. All major operating expenses forecasted	N/A	N/A		
2. Expenditure percentages reasonable	N/A	N/A		
3. Inflation factor considered	N/A			
4. Straight line depreciation method used	N/A	N/A		
5. Appropriate useful life and salvage value used	N/A	N/A		
6. Interest rates used are reasonable	N/A	N/A		
7. Unusual or significant loan agreement restrictions	N/A	N/A		
8. Debt amortization schedule	N/A	N/A		
9. All financing costs considered	N/A	N/A		
10. Special fund created or funded depreciation required	N/A	N/A		
11. Other types of financing considered	N/A	N/A		

* If appropriate.

HOSPITAL LOAN FEASIBILITY CHECKLIST (CONT.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Forecasted Financial Statements (3-5 years)				
1. Statement of Revenue and Expenses	N/A	N/A	___	___
2. Statement of Cash Flow	N/A	N/A	___	___
3. Statement of Financial Condition (Balance Sheet)	N/A	N/A	___	___
4. Statement of Changes in Fund Balances	N/A	N/A	___	___
5. Comparison of differences in *pro forma* financial statement submitted to FmHA and to certificate-of-need agency (if applicable)	N/A	N/A	___	___
Financial Ratio Analysis				
1. Financial ratio analysis performed				
Management Analysis				
1. Trustee background examined	N/A	N/A	___	___
2. Degree of facility's community involvement	N/A	N/A	___	___
3. Past fund raising success	N/A	N/A	___	___
4. Degree of volunteer involvement	N/A	N/A	___	___
5. Local medical community support	N/A	N/A	___	___
6. Suitable living areas for professionals	N/A	N/A	___	___
7. Management knowledge and experience	N/A	N/A	___	___
8. Facility accreditation and affiliations	N/A	N/A	___	___
9. Facility in compliance with public health and fire safety standards	N/A	N/A	___	___
10. Staff morale and turnover	5-10%	___	___	___
11. Use of recent technology advances	N/A	N/A	___	___
12. Effectiveness of utilization review procedures	N/A	N/A	___	___
13. Accounts receivable as percent of current assets	55-90%	___	___	___
14. Bad debts as percent of accounts receivable	3-7%	___	___	___
15. Current aging schedule used	N/A	N/A	___	___
16. Degree of borrowing to meet current liabilities	N/A	N/A	___	___
17. Discounting or factoring of accounts receivable	N/A	N/A	___	___
18. Maximization of third-party reimbursement	N/A	N/A	___	___
19. Timeliness and accuracy of third-party claim filings	N/A	N/A	___	___

HOSPITAL LOAN FEASIBILITY CHECKLIST (CONT.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Management Analysis (con't.)				
20. Usage of Medicare Periodic Interim Payment (PIP) system	N/A	N/A	___	___
21. Practice of receiving bids for large procurements	N/A	N/A	___	___
22. Delinquency in vendor payment	N/A	N/A	___	___
23. Application of performance indicators (see Chapter X)	N/A	N/A	___	___
24. Hospital wide plan to contain costs and maintain a reasonable level of productivity	N/A	N/A	___	___
25. Administrator-board-physician agreement concerning financial management	N/A	N/A	___	___

* If appropriate.

FINANCIAL RATIO ANALYSIS

Financial Ratio(A)	Ranges (B) (1981 Values)	Applicant's Calculated Value
Profitability		
Deductible	.10-.17	_____
Markup	1.12-1.25	_____
Operating Margin	0.0-.05	_____
Nonoperating Revenue	.09-.74	_____
Return on Total Assets	.02-.07	_____
Return on Equity	.03-.14	_____
Liquidity		
Current Ratio	1.51-2.65	_____
Quick Ratio	1.23-2.17	_____
Acid-Test Ratio	.07-.54	_____
Days in Patient Accounts Receivable	50.54-72.36	_____
Average Payment Period	39.64-58.82	_____
Days Cash on Hand	3.65-27.46	_____
Leverage		
Equity Financing Ratio	.38-.72	_____
Cash Flow on Total Debt	.10-.36	_____
Long-Term Debt to Equity	.11-1.26	_____
Times Interest Earned	1.76-9.32	_____
Debt Service Coverage	2.06-6.61	_____
Activity		
Total Asset Turnover	.78-1.42	_____
Fixed Asset Turnover	1.34-2.64	_____
Current Asset Turnover	3.27-4.97	_____
Inventory Turnover	37.06-67.48	_____

NOTE A: See Table IX-1 for definitions

NOTE B: The ranges listed represented the highest and lowest values obtained from the survey. These should be used only as guidelines, not standards.

SOURCE: The Hospital Industry Analysis Report--1981, Hospital Financial Management Association.

HOSPITAL DEMAND ANALYSIS FOLLOW-UP QUESTIONS

Facility Utilization

If occupancy rate and average length of stay fall outside of the "expected range" (in either direction), determine whether or not historical data indicates a trend toward more or less acceptable values. If a trend is shown to have developed or to be developing, the following questions should assist in uncovering possible problem areas.

If occupancy rate is lower than expected:

A. Is there adequate medical staff support?

B. Is there an adequate number of physicians in the service area (S.A.)?

C. Is the forecasted service area population large enough to support all existing facilities?

D. Is forecasted length of stay lower than current level? Why?

E. Does the facility attempt to service the needs of the entire service area?

F. Are population characteristics of the service area changing so that the residents may not require as much hospitalization?

If occupancy rate is higher than expected:

A. Is it higher than the occupancy rates of other area facilities?

B. Will proposed project alleviate the high occupancy rate?

C. Is forecasted length of stay higher than current level? Why?

D. Is adequate manpower available to staff the facility?

If average length of stay (ALOS) is lower than expected:

A. Does facility offer any specialty (i.e., OB) servies which might lower ALOS?

B. Has ALOS been calculated correctly? (pt days . admissions)

C. Is occupancy rate higher than expected causing early discharge of patients?

D. Is facility providing extensive ambulatory care services?

E. Is the facility altering its case-mix in anticipation of prospective reimbursement by DRGs?

Facility Utilization

If length of stay is higher than expected:

A. Has the ALOS figure been increased recently in an attempt to optimize occupancy?

B. Is there a utilization review procedure established within the hospital?

C. Does the facility offer any specialty services which may raise ALOS (i.e., an active psychiatric unit, long-term or intermediate care beds)?

D. Does it serve an aging population?

E. Should the facility consider altering its services and case-mix?

Service Area Utilization

If service area utilization appears lower than expected:

A. Is there a significant amount of outmigration for care?

B. Does historical data indicate a reversal in a migration trend?

C. Are there any external pressures for change that may affect utilization?

D. Is there an adequate number of physicians serving the area?

E. Is the physician community aging rapidly?

F. Are the needs of the community being met?

G. Are there any unusual characteristics of the population (age)?

If service area utilization appears higher than expected:

A. Is there an established patterns of inmigration?

B. Is this pattern showing any signs of reversing in the future (other area hospital expansions)?

C. Will Utilization Review or PSRO/PROs affect the high use rate in the future?

D. Are there any special characteristics of the population which may be causing a high use of facilities?

Ancillary Service Utilization

If ancillary utilization falls outside of the prescribed ranges, historical data must be checked to ascertain whether it is part of an established trend.

If lab tests per admission or radiology procedures per admission are lower than expected:

A. Is there an equipment-related problem?

B. Does existing equipment have sufficient capacity to meet future demands?

C. Are the population demographics unusual?

D. Is the medical staff unspecialized?

E. Are there commercial labs or radiology clinics providing services in competition with the hospital?

If lab tests per admission or radiology tests per admission are higher than expected:

A. Are physicians on medical staff routinely prescribing a full range of lab tests for all patients, regardless of diagnosis?

B. Is there any automated testing equipment which may encourage or result in excessive testing?

C. Does the facility's utilization review procedures cover lab tests ordered by physicians?

D. Does the department have sufficient capacity to meet future demands?

E. Are pathology or radiology services contracted to a physician group, rather than being provided by an in-house staff?

If Operating Room (OR) procedures per admission are lower than expected:

A. Is facility serving the needs of all communities within its service area?

B. Are OR suites adequately staffed and equipped?

C. Is there adequate support from surgeons or medical staff?

D. Are patient mix and patient acuity unusual?

Ancillary Service Utilization

If OR procedures are higher than expected:

A. Does department have sufficient capacity to meet future demands?

B. Are patient mix and patient acuity unusual?

C. Is there an unusually high ratio of surgical beds to medical beds in the hospital?

D. Does the utilization review committee include surgical procedures?

Staffing Ratios

If staffing ratios are lower than expected:

A. Is there adequate staffing to meet future demands?

B. Is there an adequate supply of physicians and support staff in the service area?

C. Has the facility initiated recruitment activities?

D. Has there been difficulty in recruiting personnel?

E. Is the pay scale at the hospital lower than at other institutions?

If staffing ratios are higher than expected:

A. Has hospital justified additional personnel?

B. Are patients being treated more intensively than necessary?

C. Does hospital utilization fluctuate significantly during the year?

D. Does hospital alter its nurse staffing patterns according to patient acuity?

NURSING HOME FEASIBILITY CHECKLIST

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Project Description				
1. Identifying information	N/A	N/A	___	___
2. Type of ownership (public, nonprofit, etc.)	N/A	___	___	___
3. Form of ownership (sole proprietorship, partnership, or corporation)	N/A	___	___	___
4. Type of construction or service proposed (new, replacement, expansion, or renovation)	N/A	___	___	___
5. Size of expansion (square feet)	N/A	___	___	___
6. Certificate of need (or 1122) approval (if applicable)	N/A	N/A	___	___
7. Estimated construction costs	N/A	___	___	___
8. Estimated increase in service capacity (number of SNF or ICF beds)	N/A	N/A	___	___
9. Estimated cost escalation per month to bid date	N/A	___	___	___
10. *Pro forma* financial statements obtained from certificate of need application	N/A	N/A	___	___
11. Narrative support from certificate-of-need (if applicable)	N/A	N/A	___	___
12. Facility ownership of 5% or greater disclosed	N/A	N/A	___	___
Assessment of Demand				
1. Primary service area correctly defined	51%	___	___	___
2. Independent demand and feasibility studies done for new facility	N/A	N/A	___	___
3. Effects on existing facilities considered	N/A	N/A	___	___
4. Commitment of necessary physicians				
--List of physicians by name, age, specialty, and annual admissions for past 3-5 years	N/A	N/A	___	___
--Change in physician composition since feasibility study	N/A	N/A	___	___
5. Trends in percent of population over 65	N/A	___	___	___
6. Nursing home beds per thousand population over 65	40-70	___	___	___
7. Service area occupancy rate	85-100%	___	___	___
8. Significant increase in admissions and occupancy rates adequately justified	N/A	N/A	___	___
9. Nursing home demand analysis sheet completed (page N-2)	N/A	N/A	___	___

* If appropriate.

NURSING HOME DEMAND ANALYSIS SHEET

Number	Source Item	Source	Amount		If Value Outside Range See Page:
A	Occupancy rate (%)	Applicant	____	70% - 100%	XI-18
B	Total Beds	Applicant	____		
C	SNF Beds	Applicant	____		
D	ICF Beds	Applicant	____		
E	Total FTEs	Applicant	____		
F	Med. and Adm. FTEs	Applicant	____		
G	Nursing FTEs	Applicant	____		
H	S.A. Population over 65	Feas. study	____		
I	S.A. N.H. Beds	Feas. study	____		
J	S.A. N.H. Patient Days	Feas. study	____		

	Analytical Item	Calculation	Amount		
K	Average Daily Census	A x B	____		
L	Patient Days	K x 365	____		
M	Market Share	L ÷ J	____		
N	Supply Share	B ÷ I	____		
O	Delivery Share	M ÷ N	____	0.9 - 1.2	XI-19
P	Total Man Hours/Patient Day	(E x 2080) ÷ L	____	3 - 6	XI-19
Q	Nursing Hours/Patient Day	(G x 2080) ÷ L	____	2 - 4	XI-19
R	Beds/Administrative FTE	B ÷ F	____	6 - 10	XI-19
S	Beds per 1,000 population over 65	I ÷ H	____	40 - 70	XI-18
T	S.A. Occupancy Rate	J ÷ (I x 365)	____	80 - 90	XI-18

NURSING HOME FEASIBILITY CHECKLIST (Cont.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Revenue Forecast				
1. Third-party payment as percent of net revenues	N/A	N/A	___	___
2. Flat fee or negotiated rate under Medicaid	N/A	___	___	___
3. 3-5 years of historical private patient daily rates	N/A	___	___	___
4. Annual forecasted increase in per diem charges	5-7%	___	___	___
5. Unresolved third-party settlement amounts	N/A	N/A	___	___
6. Change in patient mix among third-party and private pay patients	N/A	N/A	___	___
7. Exceed rates of competitive facilities	N/A	N/A	___	___
8. Use of lifetime contracts	N/A	N/A	___	___
--amount	N/A	___	___	___
9. Substantial forecasted revenue from gifts, endowment, pledges, and grants justified	N/A	N/A	___	___
10. Amount of unrestricted nonoperating revenue	N/A	___	___	___
11. Revenue forecast assumptions known	N/A	N/A	___	___
Operating Expenses and Debt Service Forecast				
1. All major operating expenses forecasted	N/A	N/A	___	___
2. Amount of interest expense payments to owners or related parties	N/A	___	___	___
3. Inflation factor considered	1.4-1.8%/mo.	___	___	___
4. Straight line depreciation method used	N/A	N/A	___	___
5. Appropriate useful life and salvage value used	N/A	N/A	___	___
6. Interest rates used are reasonable	N/A	N/A	___	___
7. Unusual or significant loan agreement restrictions	N/A	N/A	___	___
8. Debt amortization schedule	N/A	N/A	___	___
9. All financing costs considered	N/A	N/A	___	___
10. Special fund created or funded depreciation required	N/A	N/A	___	___
11. Other types of financing considered	N/A	N/A	___	___

* If appropriate.

NURSING HOME FEASIBILITY CHECKLIST (CONT.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Forecasted Financial Statements (3-5 years)				
1. Statement of Revenue and Expenses	N/A	N/A	___	___
2. Statement of Cash Flow	N/A	N/A	___	___
3. Statement of Financial Condition (Balance Sheet)	N/A	N/A	___	___
4. Statement of Changes in Fund Balances	N/A	N/A	___	___
5. Comparison of differences in pro forma financial statement submitted to FmHA and to certificate-of-need agency (if applicable)	N/A	N/A	___	___
Financial Ratio Analysis				
1. Financial ratio analysis performed (Use page N-6. Ranges listed in Hospital Checklist applicable only to hospitals)	N/A	N/A	___	___
Management Analysis				
1. Owner or trustee background examined	N/A	N/A	___	___
2. Degree of facility's community involvement	N/A	N/A	___	___
3. Past fund raising success	N/A	N/A	___	___
4. Degree of volunteer involvement	N/A	N/A	___	___
5. Local medical community support	N/A	N/A	___	___
6. Suitable living areas for professionals	N/A	N/A	___	___
7. Competitive wages paid nursing and support staffs	N/A	N/A	___	___
8. Facility accreditation and affiliations	N/A	N/A	___	___
9. Facility in compliance with public health and fire safety standards	N/A	N/A	___	___
10. Staff morale and turnover	5-10%	___	___	___
11. Full social and recreational programs available	N/A	N/A	___	___
12. Effectiveness of utilization review procedures	N/A	N/A	___	___
--delegated PSRO review	N/A	N/A	___	___
--PSRO contracted	N/A	N/A	___	___
13. Accounts receivable as percent of current assets	55-90%	___	___	___
14. Bad debts as percent of accounts receivable	3-7%	___	___	___
15. Current aging schedule used	N/A	N/A	___	___
16. Degree of borrowing to meet current liabilities	N/A	N/A	___	___
17. Discounting or factoring of accounts receivable	N/A	N/A	___	___
18. Maximization of third-party reimbursement	N/A	N/A	___	___
19. Timeliness and accuracy of third-party claim filings	N/A	N/A	___	___

NURSING HOME FEASIBILITY CHECKLIST (CONT.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Management Analysis (con't.)				
21. Practice of obtaining bids for large procurements	N/A	N/A	___	___
22. Delinquency in vendor payments	N/A	N/A	___	___
23. Application of performance indicators (see Chapter X)	N/A	N/A	___	___

* If appropriate.

FINANCIAL RATIO ANALYSIS

Financial Ratio (A)	Applicant's Calculated Value
Profitability	
Deductible	
Markup	
Operating Margin	
Nonoperating Revenue	
Return on Total Assets	
Return on Equity	
Liquidity	
Current Ratio	
Quick Ratio	
Acid-Test Ratio	
Days in Patient Accounts Receivable	
Average Payment Period	
Days Cash on Hand	
Leverage	
Equity Financing Ratio	
Cash Flow on Total Debt	
Long-Term Debt to Equity	
Times Interest Earned	
Debt Service Coverage	
Activity	
Total Asset Turnover	
Fixed Asset Turnover	
Current Asset Turnover	
Inventory Turnover	

NOTE A: See Table IX-1 for definitions

SOURCE: The Hospital Industry Analysis Report--1981, Hospital Financial Management Association.

NURSING HOME DEMAND ANALYSIS FOLLOW-UP QUESTIONS

If occupancy rate falls outside of the "expected range" (in either direction), determine whether or not historical data indicates a trend toward a more acceptable or less acceptable set of values.

If the occupancy rate is lower than expected:

A. What are primary sources of new patients for nursing homes? Hospital? Referrals? Family?

B. Is forecasted population over 65 large enough to support the facility?

C. Does location of facility provide accessibility to population?

D. Is facility near additional needed services?

E. Does the facility have sufficient physician support?

F. Does the facility participate actively in Medicare and Medicaid programs?

If the occupancy rate is higher than expected:

A. Is it higher than occupancy rates of other facilities?

B. Is the elderly population increasing within the service area?

C. Is significant inmigration occurring?

D. Will the proposed project alleviate the high occupancy rate?

E. Is adequate manpower available to staff the facility?

If delivery share is lower than expected:

A. Are known needs of the service area's aged population being met?

B. Is there an adequate number of physicians serving the area?

C. Are there any unusual characteristics of the population?

D. Is there a reputation problem that is affecting referrals?

E. Has there been any adverse publicity?

F. Does the facility have a sound working relationship with a hospital in terms of discharge planning?

NURSING HOME DEMAND ANALYSIS FOLLOW-UP QUESTIONS (CONT.)

If delivery share is higher than expected:

A. Are there any special characteristics of the population which may be causing a high use of facilities?

B. Will utilization review or PSRO/PROs affect the high use rate in the future?

C. Is there an established pattern of inmigration?

If staffing indicators are lower than expected:

A. Do forecasted staffing patterns meet Medicare/Medicaid and licensing requirements?

B. Are wages and fringe benefits competitive?

C. Has sufficient interest been shown by area physicians to provide adequate medical coverage?

D. Have employee recruitment activities been attempted?

E. Is there an adequate supply of trained support personnel in the area?

F. Is employee turnover rate high? Why?

If staffing indicators are higher than expected:

A. Is the patient mix heavily oriented toward skilled care rather than less intensive care?

B. Do local or state requirements require higher staffing ratios than other jurisdictions?

C. Does the facility provide other services to residents beyond nursing and expected support services?

AMBULATORY CLINIC LOAN FEASIBILITY CHECKLIST

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Project Description				
1. Identifying information	N/A	N/A	___	___
2. Type of ownership (public, nonprofit, etc.)	N/A	___	___	___
3. Form of ownership (sole proprietorship, partnership, or corporation)	N/A	___	___	___
4. Type of construction or service proposed (new, replacement, expansion, or renovation)	N/A	___	___	___
5. Size of expansion (square feet)	N/A	___	___	___
6. Certificate of need (or 1122) approval (if applicable)	N/A	N/A	___	___
7. Estimated construction costs	N/A	___	___	___
8. Estimated increase in service capacity (number of visits, number of procedures, etc.)	N/A	___	___	___
9. Estimated cost escalation per month to bid date	N/A	___	___	___
10. *Pro forma* financial statements obtained from certificate of need application	N/A	N/A	___	___
11. Narrative support from certificate-of-need (if applicable)	N/A	N/A	___	___
12. Facility ownership of 5% or greater disclosed	N/A	N/A	___	___
Assessment of Demand				
1. Primary service area correctly defined	51%	___	___	___
2. Independent demand and feasibility studies done for new facility or service	N/A	N/A	___	___
3. Effects on existing facilities considered	N/A	N/A	___	___
4. Commitment of necessary physicians				
--List of physicians by name, age, specialty, and annual admissions for past 3-5 years	N/A	N/A	___	___
--Change in physician composition since feasibility study	N/A	N/A	___	___
5. Large scale inmigration forecast	N/A	N/A	___	___
6. Large scale outmigration forecast	N/A	N/A	___	___
7. Service area population growth trends	N/A	___	___	___
8. Service area birth rate per thousand	12.5-15.0	___	___	___
9. Trends in percent of population over 65	N/A	___	___	___
10. Change in local third-party coverage for preventive and ambulatory services	N/A	___	___	___
11. Physicians per 100,000 population	125-200	___	___	___
12. Number of emergency room visits per inpatient admission	1.9-2.2	___	___	___
13. Number of hospital outpatient visits per thousand population	800-1,200	___	___	___
14. Significant increase in visits adequately justified	N/A	N/A	___	___
15. Ambulatory clinic demand analysis sheet sheet completed (page A-2)	N/A	N/A		

* If appropriate.

AMBULATORY CLINIC DEMAND ANALYSIS SHEET

Number	Source Item	Source	Amount	If Value Outside Range See Page:
A	Service Area MDs Delivering Primary Care (%)	Feas. Study	____	
B	Forecasted Service Area Annual E.R. Visits	Feas. Study	____	
C	Forecasted Service Area Annual OPD Visits	Feas. Study	____	
D	Service Area Population	Feas. Study	____	
E	Forecasted Annual Visits at Proposed Facility	Applicant	____	
F	Forecasted Annual Lab Tests at Proposed Facility	Applicant	____	
G	Forecasted Radiology Procedures at Proposed Facility	Applicant	____	
H	Physicians to be on Staff at Proposed Facility	Applicant	____	
I	Para-Professionals to be on Staff at Proposed Facility	Applicant	____	

	Analytical Item	Calculation	Amount		
J	Service Area Annual Outpatient Visits/ 1,000 pop.	(B+C+E)x1,000÷D	____	800 - 1200	XI-27
L	Servie Area Pop./Phys.	D ÷ A	____	1500 - 2250	XI-27
K	Visits Per Staff MD Per Week	E ÷ (Hx50)	____	130 - 170	XI-27
L	Service Area Population/ Para-Professional	D ÷ I	____	1000 - 1750	XI-27
M	Lab Tests Per Visit	F ÷ E	____	0.1 - 0.3	XI-28
N	Radiology Procedures Per Visit	G ÷ E		0.05 - 0.2	XI-28

AMBULATORY CLINIC LOAN FEASIBILITY CHECKLIST (CONT.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Revenue Forecast				
1. Third-party payment as percent of net revenues	N/A	N/A	___	___
2. Facility integral part of hospital financial structure	N/A	N/A	___	___
3. 3-5 years of historical charges per visit	N/A	___	___	___
4. Annual forecasted increase in per diem charges	N/A	___	___	___
5. Unresolved third-party settlement amounts	N/A	N/A	___	___
6. Change in mix among third-party payors	N/A	N/A	___	___
7. Exceed rates of competitive facilities	N/A	N/A	___	___
8. Percent of commercial insurers and other charge payors	N/A	___	___	___
9. Other operating revenue as percent of net total patient revenue	N/A	___	___	___
10. Nonoperating revenue as percent of net total patient revenue	N/A	___	___	___
11. Substantial forecasted revenue from gifts, endowments, pledges, and grants justified	N/A	N/A	___	___
12. Amount of non-operating funds (unrestricted)	N/A	___	___	___
13. Revenue forecast assumptions known	N/A	N/A	___	___
Operating Expenses and Debt Service Forecast				
1. All major operating expenses forecasted	N/A	N/A	___	___
2. Percent of patients referred to other physicians	N/A	___	___	___
3. Inflation factor considered	1.4-1.8%/mo.	___	___	___
4. Straight line depreciation method used	N/A	N/A	___	___
5. Appropriate useful life and salvage value used	N/A	N/A	___	___
6. Interest rates used are reasonable	N/A	N/A	___	___
7. Unusual or significant loan agreement restrictions	N/A	N/A	___	___
8. Debt amortization schedule	N/A	N/A	___	___
9. All financing costs considered	N/A	N/A	___	___
10. Special fund created or funded depreciation required	N/A	N/A	___	___
11. Other types of financing considered	N/A	N/A	___	___

* If appropriate.

AMBULATORY CLINIC LOAN FEASIBILITY CHECKLIST (CONT.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Forecasted Financial Statements				
1. Statement of Revenue and Expenses	N/A	N/A	___	___
2. Statement of Cash Flow	N/A	N/A	___	___
3. Statement of Financial Condition (Balance Sheet)	N/A	N/A	___	___
4. Statement of Changes in Fund Balances	N/A	N/A	___	___
5. Comparison of differences in pro forma financial statement submitted to FmHA and to certificate-of-need agency (if applicable)	N/A	N/A	___	___
Financial Ratio Analysis				
1. Financial ratio analysis performed (Use page A-6. Ranges listed in Hospital Checklist not applicable to ambulatory care facilities)	N/A	N/A	___	___
Management Analysis				
1. Trustee background examined	N/A	N/A	___	___
2. Degree of facility's community involvement	N/A	N/A	___	___
3. Past fund raising success	N/A	N/A	___	___
4. Degree of volunteer involvement	N/A	N/A	___	___
5. Local medical community support	N/A	N/A	___	___
6. Suitable living areas for professionals	N/A	N/A	___	___
7. Management knowledge and experience	N/A	N/A	___	___
8. Facility accreditation and affiliations	N/A	N/A	___	___
9. Facility in compliance with public health and fire safety standards	N/A	N/A	___	___
10. Staff morale and turnover	5-10%	___	___	___
11. Use of recent technology advances	N/A	N/A	___	___
12. Presence of internal peer review mechanism	N/A	N/A	___	___
13. Accounts receivable as percent of current assets	55-90%	___	___	___
14. Bad debts as percent of accounts receivable	3-7%	___	___	___
15. Current aging schedule used	N/A	N/A	___	___
16. Degree of borrowing to meet current liabilities	N/A	N/A	___	___
17. Discounting or factoring of accounts receivable	N/A	N/A	___	___
18. Maximization of third-party reimbursement	N/A	N/A	___	___
19. Timeliness and accuracy of third-party claim filings	N/A	N/A	___	___

AMBULATORY CLINIC LOAN FEASIBILITY CHECKLIST (CONT.)

LOAN EVALUATION FACTORS	Standard Value*	Actual Value	Factors Considered Yes	Factors Considered No
Management Analysis (con't.)				
20. Practice of receiving bids for large procurements	9.63%	___	___	___
21. Delinquency in vendor payments	N/A	N/A	___	___
22. Reasonable physician staffing per 10,000 patients	N/A	N/A	___	___
23. Reasonable non-physician staffing per 10,000 patient population	N/A	___	___	___

* If appropriate.

FINANCIAL RATIO ANALYSIS

Financial Ratio (A)	Applicant's Calculated Value
Profitability	
Deductible	
Markup	
Operating Margin	
Nonoperating Revenue	
Return on Total Assets	
Return on Equity	
Liquidity	
Current Ratio	
Quick Ratio	
Acid-Test Ratio	
Days in Patient Accounts Receivable	
Average Payment Period	
Days Cash on Hand	
Leverage	
Equity Financing Ratio	
Cash Flow on Total Debt	
Long-Term Debt to Equity	
Times Interest Earned	
Debt Service Coverage	
Activity	
Total Asset Turnover	
Fixed Asset Turnover	
Current Asset Turnover	
Inventory Turnover	

NOTE A: See Table IX-1 for definitions

SOURCE: The Hospital Industry Analysis Report--1981, Hospital Financial Management Association.

AMBULATORY CLINIC DEMAND ANALYSIS FOLLOW-UP QUESTIONS

If utilization indicators appear lower than expected:

A. Is there an adequate number of private physicians to support future demand for ambulatory care services?

B. Are competing ambulatory care projects planned and if so, how will these alter the facility's utilization?

C. Are hospital emergency rooms treating a majority of non-emergency cases due to a lack of primary care physicians in the community?

D. Is proposed facility easily accessible to the service area population?

E. Are secondary care resources available to support primary care delivery services?

F. Is the facility available to all residents of the target population?

G. Are sufficient qualified personnel available to staff the facility?

H. Are para-professionals available to augment the services of physicians?

I. Is there a realistic personnel recruitment plan?

J. Are the hours of operation convenient to the service area population?

K. Is the mix of medical services offered consistent with the needs of the service area?

L. Do cooperative service agreements with local hospitals exist?

M. Is there an established referral mechanism to specialists?

If utilization indicators appear higher than expected:

A. Is the facility serving a population outside of its service area?

B. Are there any special characteristics of the population which may be causing a high use of the facility?

C. Is there an adequate number of qualified personnel in the area?

D. Have physician or para-professional recruitment programs been instituted?

AMBULATORY CLINIC DEMAND ANALYSIS FOLLOW-UP QUESTIONS (CONT.)

If ancillary department utilization ratios are lower than expected:

A. Are needed ancillary services available on-site or nearby?

B. Is there an equipment related problem?

C. Are there commercial labs or radiology clinics providing services in competition with the client?

If ancillary department utilization ratios are higher than expected:

A. Are physicians on staff routinely prescribing a full range of lab tests for all patients, regardless of diagnosis?

B. Is there any automated testing equipment which may encourage or result in excessive testing?

C. Does the department have sufficient capacity to meet future demands?

D. Is the clinic providing services normally provided at a hospital?

GLOSSARY

Accelerated Depreciation. Depreciation method that writes off the cost of an asset at a faster rate than the write-off under the straight-line method. The two principal methods of accelerated depreciation are: (1) sum-of-years digits and (2) double declining balance.

Accruals. Income earned but not yet received or liabilities incurred but not yet paid. Examples are accrued wages, accrued taxes, and accrued interest.

Accrual-Basis Accounting. An accounting system wherein revenue is recorded in the accounting period in which it is earned (whether or not cash has been received) and expenses are recorded in the accounting period in which they are incurred (whether or not cash has been disbursed for the payment of those expenses).

Acid Test. The ratio between quick assets (cash, marketable securities and receivables) and the current liabilities. It is an indication of the ability of an organization to pay all of its current liabilities quickly in cash.

Acute Care. A class of services that deals with needs which are expected to be of short-term duration (30 days or less) and that are primarily oriented toward medical problems which require intensive care and treatment. Acute care is most commonly delivered in organizations such as hospitals, surgical centers, and some clinics.

Adjustment Report for Cost Reimbursement Programs. A statement by third-party auditors indicating their proposed changes in costs claimed by the provider in its cost report.

Aging Schedule. A schedule classifying the balances of all receivables, according to whether the amount is not yet due or past due, by varying lengths of time. Estimates of the average collection period for each class of receivables provide a basis for estimating uncollectibles.

Ambulatory Care. Health services rendered to persons who are not kept overnight in a health care institution. Ambulatory care services are often referred to as "outpatient" services.

Amortization. Liquidation on an installment basis. Usually related to bond premiums, leaseholds, patents and other investments and intangibles.

Ancillary Services. Diagnostic or therapeutic services performed by specific hospital departments as opposed to general or routine patient services, which are included in room and board. Charges are customarily made by the provider for these services over and above a routine service charge.

Annual Implementation Plans. Health Systems Agency's plan to implement on an annual basis those goals set forth in its Health System Plan.

Audit. The examination of financial and statistical records of a provider in order to ascertain that the costs claimed by that provider are in accordance with the law and regulations promulgated by the Secretary of the Department of Health and Human Services.

Average Daily Census. The average number of inpatients occupying beds in a facility each day for a given period of time.

Average Length of Stay. The average number of days of service rendered to inpatients within a given period.

Bad Debts. Specific receivables determined to be uncollectible, in whole or in part, either because the debtors cannot pay or because the creditor finds it impracticable to enforce payment.

Balloon Payment. When a debt is not fully amortized and the final payment is larger than the preceding payments, that payment is called a "balloon" payment.

Benefits. Services provided under an insurance policy or prepayment plan. In the case of Blue Cross, the payments are made directly to the helth facility on behalf of all patients who are covered. Commercial insurers either make payments to the health facility or the patient.

Beneficiary. An individual entitled to have payment made on his behalf or to him under an insurance program (generally refers to the Medicare program).

Blue Cross Association (BCA). The national trade association of Blue Cross Plans and the primary fiscal intermediary in the Medicare program.

Blue Cross Plan. A nonprofit medical service company, or plan. There are currently 98 such plans within the United States, most of which are subcontractors to Blue Cross Association in the administration of Part A of the Medicare Program.

Blue Shield Plan. A nonprofit medical service company, or plan. There are 69 such plans within the United States, most of which are carriers in the administration of Part B of the Medicare Program.

Board-Designated Funds. Unrestricted funds set aside by the governing board for specific purposes or projects.

Board-Designated Investment Funds. Unrestricted funds that, at the discretion of the government board, have been designated for investment to produce income as if they were endowment funds.

Book Value. The value of an asset as shown in the accounting records of a firm.

Capital Asset. An asset with a life of more than one year that is not bought and sold in the ordinary course of business.

Capital Budgeting. The process of planning expenditures for assets whose returns are expected to extend beyond one year.

Capitalization Rate. A discount rate used to find the present value of a series of future cash receipts (sometimes called discount rate).

Capital Rationing. A situation in which a constraint is placed on the total size of the capital investment during a particular period.

Capital Structure. The permanent long-term financing patterns of an organization. Capital structure is distinguished from financial structure, which includes short-term debt plus all reserve accounts.

Capitation. The common term applied to the arrangement in which a patient or family enrolls in a health care plan and agrees to pay a periodic fixed rate for a specified set of services, regardless of whether or not he uses such services.

Cash Budget. A schedule showing cash flows (receipts, disbursements, and net cash) for an organization over a specified period, typically one year.

Cash Receipts. All money received by a facility, whether in the form of currency or checks.

Cash Disbursements. A disbursement takes place when cash is paid out, whether cash is paid at the time of discharge of an obligation or as payment in advance of the service to be rendered.

Certificate of Need. A legal confirmation by an approved agency that a proposal for establishing a program or constructing a facility will meet an estimated unmet need in a defined service area.

Charge. The gross price at established rates imposed upon patients for services.

Charity Allowance. The difference between gross-revenue charges at established rates and amounts received from (1) a patient who the facility has determined to be indigent or (2) voluntary agencies or government units on behalf of an indigent patient.

Chart of Accounts. A systematically arranged list of accounts of a specific concern, giving account names and numbers, if any.

Chattel Mortgage. A mortgage on personal property (not real estate). A mortgage on equipment would be a chattel mortgage.

Coinsurance. A provision requiring that both the insurer and the insured party share the payment for hospital and medical expenses in a specified ratio.

Collateral. Assets that are pledged in order to secure a loan.

Commercial Paper. Unsecured, short-term promissory notes of large firms, usually issued in denominations of $25,000 or more. The rate of interest on commercial paper is typically somewhat below the prime rate of interest.

Compensating Balances. Cash deposits required by a bank as partial compensation for lending money or providing other services to a health facility.

Contractual Allowance. The difference between gross charges for services rendered and amounts received from patients or third-party payors. Contractual Allowances are distinguished from uncollectible accounts resulting from credit losses.

Contractual Replacement Funds. Funds set aside by a facility as a result of an agreement with a third-party payor for renewal and/or replacement of property, plant, and equipment.

Cost Finding. The process of allocating the costs of the non-revenue producing cost centers to the revenue-producing cost centers on the basis of the statistical data that indicate the amount of service rendered by each non-revenue producing center to the revenue producing centers.

Cost Reimbursement. Contractual reimbursement, usually for all reasonable costs of patient care incurred by providers, and paid by a third-party payor according to law, regulation, or contract.

Cost Report. A cost analysis prepared by a provider of health care as a basis for claiming reimbursable costs under third-party contract agreements.

Courtesy Allowance. The difference between established hospital rates for patients and lower charges made to physicians, clergymen, employees, and their dependents for similar services.

Deductible. That portion of covered hospital and medical charges that an insured person must pay before his policy benefits begin. Proposed as a mechanism to discourage over-utilization or to avoid processing small claims.

Debenture. A term used to define unsecured indebtedness, usually involving long-term obligations.

Default. The failure to fulfill a contract. Generally, default refers to the failure to pay interest or principal on debt obligations.

Delivery Share. A general indictor of how one facility relates to its competitors. It reflects the ratio of market share to supply share.

Demand. The sum of explicit requests for a given medical care service, either by the patient or the doctor treating the patient. Demand, however, does not indicate need.

Depreciation. The estimated cost of expired services of fixed assets during a given period of time.

Diagnostic-Related Group (DRG). Specific diagnostic categories which will be used as the basis for prospective reimbursement by Medicare. Currently, there are 467 DRGs which, collectively, represent all possible types of illness. Medicare reimbursement will be determined by setting a rate for each DRG and subsequently assigning each patient, upon discharge, to the appropriate group. Although the current list of DRGs is applicable only to inpatient care, it may eventually be expanded to include outpatient and long-term care.

Discounting. The process of finding the present value of a series of future cash flows. Discounting is the reverse of compounding.

Discounting of Accounts Receivable. Short-term financing where accounts receivable are used to secure the loan. The lender does not buy the accounts receivable, but simply uses them as collateral for the loan. Also called "pledging of accounts receivable."

Donated Services. The estimated monetary value of service by persons who receive no monetary compensation or partial compensation for their services. The term is usually applied to services rendered by members of religious orders or volunteer societies.

Double Distribution. A cost-finding technique involving the distribution of general service costs first to the appropriate general service centers and then to ancillary cost centers.

Endowment Funds. Funds in which a donor has stipulated, as a condition of his gift, that the principal of the fund is to be maintained inviolate for a period (in perpetuity or a term of years) and that during that period only income from investments of the fund may be expended.

Equity. The net worth of an enterprise. Also known as fund balance.

Exclusions. Specific hazards or conditions listed in an insurance policy for which the policy will not provide benefit payments.

Expected Return. The rate of return a firm expects to realize from an investment. The expected return is the mean value of the probability distribution of possible returns.

Final Cost Settlement. The difference between costs covered by third-parties as reflected in the final or audited cost report and any interim payments.

Financial Feasibility Study. A study of which the purpose is to determine whether a proposed capital expenditure and the subsequent operations related to that expenditure can be financed by the facility intending to undertake the project.

Fixed Assets. Assets of a relatively permanent nature held for continuous use in hospital operations and not intended to be converted into cash through sale.

Fixed Charges. Costs that do not vary with the level of output.

Free Care. Charity allowances (see definition) excluding bad debts or uncollectible accounts.

Full-time Equivalent (FTE). An employee who is paid on the basis of a 40-hour week, 173 hours per month or 2,080 hours per year. No distinction is made between employees who actually work full-time and those who work only part-time. For example, two employees who each work 1040 hours per year comprise one FTE.

Fund. A self-contained accounting entity set up to account for a specific activity or project.

Fund Accounting. The process of managing one or more funds and maintaining statements of debits and credits. Double-entry accounts are self-balancing, and from them a balance sheet and operating statement may be prepared.

Fund Balance. The excess of assets over liabilities (net equity or owner's equity). An excess of liabilities over assets is known as a deficit in fund balance.

Funded Debt. Debt amortized from one or more of a facility's funds.

Funded Depreciation. The transfer of cash periodically from the general fund to a capital fund for the purpose of replacing an asset when its useful life expires or when a new item of equipment is required.

General Fund. The group of accounts used to record transactions arising from general operations and day-to-day operations of a facility.

Goodwill. Intangible assets of a firm established by the excess of the price paid for the asset over its book value.

Governing Body. Board of directors, board of trustees, board of managers (or other controlling group) of a facility.

Group Insurance. A policy protecting a specified minimum number of persons usually having the same employer.

Health Care Financing Administration (HCFA). A division of the Department of Health and Human Services which has responsibility for health care policy formulation and administration of the Medicare program, as well as for the Federal portion of the Medicaid program.

Health Care System. The network of personal health care services, consisting of persons who give services, facilities and resources that support these services, financing mechanisms, the legal framework, and the communications and relationships that link one part of the system to another.

Health Maintenance Organization (HMO). An organization that contracts with consumers (or employers on their behalf) to assure the availability of specified health services in exchange for periodic prepayment. HMOS may, or may not be federally qualified. Those which are federally qualified are (1) entitled to financial assistance from the government and (2) can obligate employers who provide their employees (of which there must be at least 25) with health care benefits to offer their HMO plans as insurance alternatives.

Health Systems Agencies (HSAs). Local planning agencies established to review the capital expansion proposals submitted by facilities within its jurisdiction. The role of the HSA also includes (a) gathering and analyzing data from objective and subjective sources (b) formulating health plans and criteria for judging community needs and (c) ensuring that proposed projects coincide with the local health plan.

Health Systems Plans (HSP). These plans are the blueprints for meeting community health needs and are drawn up by Health Systems Agencies.

Home Health Agency. A public or private organization that provides nursing care and other health services in the patient's home.

Hospital-Based Physician. A physician who provides services in a hospital setting and who has a contractual relationship with the hospital. Contractual relationships vary widely; a physician may be paid an agreed amount, or the hospital may remit to him an agreed portion of the collections from patients. The hospital may collect the funds from patients either in its own right or as agent for the physician.

Hospital Inpatient. A hospital patient who is provided with room and board and continuous general nursing service in an area of the hospital where patients generally stay at least overnight.

Indemnity Benefits. A policy under which the insured person is directly paid a specified sum of money toward his hospital and medical expenses from which he, in turn, pays the provider of care. In certain circumstances, such benefits may be assigned legally to the provider, removing the patient as the "middleman."

Inmigration. The process by which a facility attracts patients from outside its service area.

Intermediate Care Facility (ICF). These facilities provide basic medical, nursing and social services in addition to room and board for persons not capable of independent living. This category of nursing care is less intensive than that provided by skilled nursing facilities. They are recognized for participation in the Medicaid program only.

Interim Rate. A negotiated payment made by a third party payor to a hospital to allow that institution to continue operations until a final reimbursement settlement is made.

Intermediary. An organization which contracts with the Secretary of HHS to evaluate the operations of facilities which treat Medicare patients, make reasonable cost determination and determine the appropriate amount of reimbursement for those providers. In the future, intermediaries will base Medicare payments on a facility's DRG mix.

Internal Rate of Return (IRR). The rate of return on an asset investment which equates the present value of future cash flows to the present value of the cost of the investment.

Living Trust Funds. Funds made available to an institution on condition that that institution pay periodically to a designated person, or persons, the income earned on the funds acquired for the lifetime of the designated person, or persons, or for a specified period.

Long-term Care. Care given to patients who suffer from a chronic disease and/or impairments that require a prolonged period of care (more than 30 days). This care is generally given in chronic disease hospitals, nursing homes, rehabilitation centers or in the community through home health services, day-care programs, foster-care programs, or semi-independent living residences. Such care includes medical supervision and/or assistance.

Market Share. The portion of an entire market which a facility serves, the remainder of which is served by competitors.

Marketable Security. Short-term financial instruments that can be readily bought or sold. Often used as a short-term investment alternative for temporary surplus cash balances.

Medicaid. A state-administered third-party reimbursement program designed to finance health care of the medically indigent and those on certain public welfare programs. 50 percent of the program costs are borne by the states, and the remaining 50 percent are borne by the federal government.

Medical Staff. All licensed physicians (including dentists, podiatrists and other ancillary health professions) who have privileges to treat patients in a particular hospital.

Medical Services. Patient care services that are performed by a physician or by professional and technical personnel under supervision of a physician.

Medicare. A third-party reimbursement program administered by the Health Care Financial Administration that finances the medical care of persons 65 and over and some qualified persons under 65. "Part A" covers inpatient hospital services and "Part B" covers physicians' services and outpatient services.

Money Market. Financial markets in which funds are borrowed or loaned for short periods. (The money market is distinguished from the capital market, which is the market for long-term funds.)

Mortgage. A pledge of designated property as security for a loan.

Multi-hospital System. A system which combines the resources of two or more facilities in order to achieve economics of scale, improve access to resources (human, physical and capital) or share areas of expertise. Due to the increasingly competitive health care environment, many facilities are becoming part of a system (through merger, acquisition or managment contract) in order to improve their chances for survival.

Non Revenue-Producing Cost Centers. Hospital services or departments (such as dietary or laundry) that provide necessary services to other hospital departments but do not generate revenue. Costs of these centers are generally allocated among revenue-producing departments.

Nursing Salary Cost Differential. Allowance added to a facility's nursing expense in order to compensate for the above-average cost of inpatient routine nursing care furnished to aged patients.

Occupancy Rate. The ratio of actual beds occupied to the total number of beds operated (or licensed) during any given period of time.

Outmigration. The process by which a facility loses patients in its service area to a facility outside its service area.

Outpatient. A person who receives a health care services in a clinic or other department without being admitted overnight as a patient.

Patient-day. The unit of measure for routine services rendered to one inpatient between the census-taking hour on two successive days.

Patient Origin. Residence location of patients admitted to or served by a particular facility.

Peer Review Organizations (PROs). Agencies which will gradually replace Professional Standards Review Organizations in the future. There will be fewer PROs than PSROs, and each will cover a much broader geograpical area. In addition, PROS will be privately controlled (by health care insurers, health care associations, medical group practices, etc.), thereby eliminating the "neutral party" concept on which PSROs were based. However, government approval of PROs will still be required.

Per Diem Cost. Average cost per inpatient day computed by dividing the total inpatient cost by the total number of inpatient days of care.

Plant. A hospital's physical properties such as land, buildings, and equipment. Plant does not include assets which are not used directly for hospital operations.

Plant Fund. A fund account set-up for a facility's investment in its own land, buildings and equipment, as well as long-term debt related to its facilities.

Plant Replacement and Expansion Fund. A fund set aside--and generally carried as part of the plant fund--for renewal or replacement of the hospital's physical plant.

Pooled Investments. Assets of two or more funds consolidated for investment purposes.

Precatory Funds. Funds for which the donor has expressed a desire concerning their use, although they are legally unrestricted.

Preferred Provider Organization. A group of low-cost health care providers which band together for purposes of negotiating fees in exchange for a guaranteed volume of patients. Generally, PPO services are marketed to employers who provide their employees with health care benefits (and for whom there is a strong incentive to contain health care expenditures).

Primary Care. Rudimentary health care services which serve as a referral mechanism to higher levels of care.

Professional Standards Review Organizations. (PSROs) Federally controlled agencies which have had utilization review and quality of care assessment responsibilities since their creation in 1972. Although many still perform evaluation functions, they are currently being phased out and replaced by Peer Review Organizations (see definition).

Pro Forma Statements. Projected balance sheets and income statements for selected future accounting periods. The preparation of such statements enables the manager to analyze the effect of various poli y decisions on the future financial condition and performance of the firm.

Proprietary Hospital. A privately owned medical facility operated for profit, sometimes called an investor-owned hospital.

PPS (Prospective Payment System). A prospective reimbursement system established by the Social Security Amendments of 1983, which became effective October 1, 1983 for all Part A Medicare services.

Prospective Reimbursement. Rate of reimbursement set in advance of the fiscal period in which services are delivered. Also known as prospective rate setting and prospective payment.

Provider. An individual or organization that provides health care services in exchange for payment from the purchaser. The term generally applies to institutions (i.e., hospitals, skilled nursing facilities, home health agencies) rather than individual practioners.

Rate of Return. The interest rate earned on an investment.

Relative Value Unit. Index number assigned to a specific procedure based upon the relative amount of labor, supplies and capital needed to perform that procedure.

Restricted Funds. Funds restricted by donors for specific purposes. The term refers to specific purpose and endowment funds.

Retrospective Reimbursement. Determination of rate of reimbursement after a fiscal period has passed and the health care services have been delivered.

Revenue-Producing Cost Centers. Hospital departments providing direct services to patients (such as laboratory and X-ray services) which generate their own revenues.

Routine Services. Regular room, dietary services, nursing services, minor medical and surgical supplies and the use of equipment and facilities for which separate charges are not customarily made. Instead, charges for routine services are normally made in the aggregate.

Secondary Care. A moderate level of care given to a person in need of speciality services, generally following his referral from a source of primary care. Most services given to patients in the hospital are at least at the secondary level.

Section 1122 Approval. Under Section 1122 of the Social Security Act, all health care facilities are required to submit proposals for capital expenditures to local and state agencies for review. In order to be approved, evidence that the proposed project or facility will fulfill a public health need must be provided. In addition, Medicare, Medicaid, and Title V reimbursement for services related to the project are contingent upon its approval.

Self-Responsible Patient. A patient whose health care is either entirely or partially fiananced by his own funds rather than by third party payors.

Service Area. The geographic area in which all or a majority of an institution's clientele reside. The geographic area in which all or most of the remaining patients reside is the secondary service area.

Sinking Fund (Retirement of Indebtedness Fund). A fund required by some external capital sources which is drawn upon for the retirement of indebtedness on plant assets.

Skilled Nursing Facility. An institution, or a distinct part of an institution, that provides skilled nursing care and rehabilitation services to patients who do not require full hospital care. They are eligible for both Medicare and Medicaid reimbursement.

Skilled Nursing Services. Services that must be furnished by (or under the direct supervision of) licensed nursing personnel and under the general direction of a physician.

Specific Purpose Funds. Funds restricted for a specific purpose or project. Board-designated funds do not constitute specific purpose funds.

State Health Planning and Development Agencies (SHPDAs). These agencies are designed to assimilate the health plans of health systems agencies within a state into an integral state plan. They also have final decision-making authority concerning certificate-of-need approval.

Statewide Health Coordinating Councils (SHCCs). These councils approve state health plans, review budgets for HSAs and advise state agencies. Each consists of at least 16 members, appointed by the governor, of whom 60 percent represent HSAs.

Step-Down. A method of cost finding that starts with the non revenue-producing center serving the greatest number of other centers, and then allocates its costs proportionately among those its serves. This process continues with the next non-revenue-producing center (never allocating any costs to a previously allocated center) until all costs are associated with revenue-producing services.

Subordinated Debenture. A bond having a claim on assets only after the senior debt has been paid off in the event of liquidation.

Supply Share. The ratio of the number of beds or other resources at a facility to the total number of beds or other resources in its service area.

Tangible Assets. Physical assets (as opposed to such intangible assets as goodwill and the stated value of patients).

TEFRA (Tax Equity and Fiscal Responsibility Act). Legislation enacted in 1982 which established a Medicare reinbursement methodology based on cost per discharge, in contrast to the previous cost per diem. It also mandated that a prospective payment system be established in the future.

Term Endowment Funds. Donated funds which, by the terms of the agreement, become available either for any legitimate purpose designated by the board or for a specific purpose designated by the donor upon the occurrence of an event or upon the passage of a stated period of time.

Term Loan. A loan generally obtained from a bank or insurance company with a maturity greater than one year. Term loans are generally amortized.

Tertiary Care. The most intensive of the three levels of care. It includes the administration of highly technical services and is generally delivered in an acute-care hospital.

Third-Party Payor. An organization which pays for the services provided to a patient as the result of an arrangement with the provider to care for a patient under a specific reimbursement formula. Third-party payors may be private or public in nature.

Units of Service. The general term for measuring volume of service delivered, usually over a specified period of time (i.e., number of laboratory tests per day, number of annual emergency room visits).

Unrestricted Funds. Funds that bear no externally imposed and legally enforceable restrictions regarding use. They can be used for any legitimate purpose designated by the governing body.

Use Rate. A statement of how many persons from a given service area use a facility during a specified period of time, generally expressed in admissions or patient-days per 1,000 population on an annual basis.

Utilization Review. An evaluation of service utilization trends (originally required by the Joint Commission for the Accreditation of Hospitals and subsequently written into Medicare law and some other third-party payment contracts). The major purposes are to (1) avoid unnecessary admissions and ancillary service usage and (2) prevent unnecessarily long lengths of stay.

Voluntary Non-Profit Hospital. A medical institution operated under the sponsorship of a community, religious order, or other nonprofit entity.

Working Capital. An organization's investment in short-term assets--cash, short-term securities, accounts receivable, and inventories. Gross working capital is defined as an organization's total current assets. Net working capital is defined as current assets minus current liabilities.

Yield. The rate of return on an investment.

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